Governors Matter: A Comparative Study of State-Business Relations in Russia's Regions[1]

1. Introduction

Governance institutions matter for development. Scholars have linked better governance to economic growth (Kaufmann et al. 1999, 2002; Kaufmann and Kraay 2002), foreign direct investment (Globerman and Shapiro, 2002), higher firms' productivity and growth (Batra et al. 2003; Dollar et al. 2005), entrepreneurship (Hart 2003), and regional development (Rodríguez-Pose 2013). Most researchers agree that 'good' governance institutions would have to provide for quality of public service provision, security of property rights, control of corruption, and macroeconomic stability contributing to the business environment that reduces uncertainty and promotes productive investment activities. It is also increasingly clear that the particular institutional arrangements that work in one context do not in others (Jütting 2003). Hence, specific governance institutions that could serve the aforementioned purposes could be different (Dixit 2004; Rodrik 2008). Moreover, alternative governance models exist not only at the state level. A significant heterogeneity in governance institutions that shape state-business relations has been found at the subnational level as well (Yakovlev 2006; Pyle 2009; Cali and Sen 2011). Motivated by this literature, this study seeks to identify the important subnational institutional arrangements that shape specific contexts (in our case it is a context of the Russian Federation) and make for (or inhibit) a favorable business environment that can promote investment, growth, and increase welfare.

Massive data-collecting projects such as the Doing Business project and Enterprise Surveys[2] have been sponsored by the World Bank to assess business conditions around the world and identify factors that shape business environment and firms' economic behavior. These projects, motivated by the assumption that regulatory environment is linked to

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[2] http://www.doingbusiness.org; http://www.enterprisesurveys.org;

economic outcomes, provide an empirical basis for testing relationships between regulation and development, allow for country benchmarking and comparison, and inform policymakers about relationships between specific regulations and economic variables (Davis and Kruse 2007, p. 1098). Making use of such initiatives, this study relies on the latest 2011 Business Environment and Enterprise Performance Survey (BEEPS) for the Russian Federation to explore state-business environment and factors in the institutional environment associated with firms' '(un)happiness' levels across the country. Building on the key insight regarding the importance of regulatory and other types of uncertainty for the business environment and firm behavior (Dixit and Pindyck 1994), we test hypotheses focusing on the role of regional executive authorities in Russia. Our analysis suggests that regional executives represented by Russia's regional governors are of paramount importance for firms' perceptions of the regional business environment and the obstacles they face in their operation. Russian firms reveal a strong preference for administrative continuity in the regions and their insecurities and complaints increase significantly during political transitions associated with gubernatorial change. Additionally, firms seem more content in regions with local governors – those whose careers developed within the region as opposed to those who assumed the positions as outsiders - reflecting, arguably, the importance of pre-existing ties and relationships between political and economic elites in the regions. The study provides a systematic illustration of the degree to which economic actors in Russia find themselves vulnerable and dependent on regional administrative structures and of the shifting nature of firms' perceptions and experiences of the regional business environment as the region-wide economic-political ties stabilize and fears related to political change subside.

The remainder of the paper consists of six sections including the discussion of the interplay between Russian businesses and regional political elites, followed by the empirical specification, data, results, sensitivity analysis and the combined discussion and conclusions.

2. Russian Governors and Regional Businesses – What is at Stake?

The business environment and state-business interaction in Russia's regions vary considerably (CEFIR 2006; Yakovlev 2006; Plekhanov and Isakova 2011). The 2011 BEEPS survey highlights the regional diversity in business climate: regional location is significantly correlated with firms' perceptions of administrative burden, corruption, and state capture (Kisunko and Knack 2013). The extensive literature on state-business relations in Russia does include studies that have approached the subject from a regional perspective. Much attention in this regionally grounded research is paid to institutional factors, including the role of political institutions in regional economic growth (Libman 2010), firms' entry and exit (Bruno et al. 2013), and firm behavior with regard to limiting government predation (Pyle 2009). A number of scholars focus on the role of business associations in providing firms with lobbying services and collective action opportunities that became especially important in the new environment of a more consolidated bureaucratic state machine in the 2000s (Frye 2002; Yakovlev 2006; Markus 2007; Pyle 2009; Duvanova 2011). Both formal and informal institutions on the regional level appear important (Frye et al., 2009; Adachi 2011; Bruno et al. 2013; Rochlitz 2014). The special relations between firms and regional governments are found to be consequential for firm-level decision-making and the regional-level business environment (Frye 2002; Slinko, et al. 2005; Yakovlev, 2006, 2011).

While it has been shown that firms' geographical location matters and that regional variation in institutional characteristics might potentially be an important factor for explaining differences in firms' entry, growth and productivity and, consequently, regional economic development and prosperity, the questions of *why* regions matter and *which* regional institutions make a difference for firms' behavior have not been yet answered convincingly. Plekhanov and Isakova (2011) use 2008-09 BEEPS data to study regional differences in the business environment in Russia but data constraints limit their analysis of the institutional determinants of regional variation in the business environment. Kisunko and Knack (2013) conduct an exploratory analysis using the more recent BEEPS data and point out the potential importance of regional level policy and institutional differences. Their focus, however, is on regional and national trends in the business environment rather than on factors associated with regional differentiation. Given the availability of the 2011 BEEPS data that is regionally representative, the exploration of

principal regional-level institutions that shape business environment appears both timely and significant.

A good place to start the analysis is to observe that the defining and well-documented feature of Russian regional economic activities is a very strong mutual dependence between economic and political actors (Stoner-Weiss 2002; Frye 2002; Slinko et al. 2005; Yakovlev 2006; Sharafutdinova 2010). The balance of power between the business and the state has shifted, in the last decade and a half, in favor of the state revealing the effectiveness of president Vladimir Putin's policies aimed at strengthening the executive vertical of power (Gans-Morse 2012, Rochlitz 2014, Yakovlev, et al., 2014). This points to the importance of the institution of the governor and his team in establishing a specific mode of relationship with regional businesses, mechanisms of exchange and other rules of state-business interaction that contribute to a predictable business environment in the region.

Governors – or regional chief executives – represent the ultimate authority in their regions, and usually, play a role of ultimate arbiters in the region's politics and economics but they never govern alone and have to develop and rely on their teams to get things done. This regional chief along with his or her team (frequently referred to by Russian experts as *regional'naya vlast'* or *administratsiya*) is arguably the key regional actor with the potential to make a difference both in the overall regional business climate and in the prospects of a specific firm. One of the key factors associated with the regional administration is the degree of its continuity reflected in the length of gubernatorial stay in office. The core gubernatorial team rarely changes under the same regional chief; every new regional governor, on the other hand, tends to bring with him/herself a number of new people that are placed in key administrative positions (Podvintsev 2009).[3] Given the centrality of regional executive power for the regional business environment – in terms of regulation, rules implementation, protection of property rights, providing access to government contracts, access to land and other important underpinnings of business success, it seems plausible to suggest that a lengthier stay in office for a given governor and his/her team can

[3] Even when a new governor is selected from the outgoing governor's team, the administrative team changes, albeit in a more gradual fashion (Podvintsev 2009).

be a crucial precondition for greater stability and predictability of the underlying business environment in the region.

Taking the firms' perspective, the key insight from the economic literature is that firms do not like uncertainty, which presents a fundamental challenge to their decision-making, influencing their investment strategies, restructuring, hiring and other choices that shape their economic activity (Dixit and Pindyck 1994, Bloom 2009). Uncertainty is multidimensional and can emanate from different sources such as issues related to demand and supply, regulation and legal environment, monetary and financial systems, political stability, technological shocks and various other factors (Dixit and Pindyck 1994, chapter 1). It has been shown theoretically and empirically that firms value political stability and predictability of rules as reflected in higher rates of investment and economic growth (Brunetti et al., 1998; Asiedu 2006; Malesky and Samphantharak 2008). This factor is also treated as an essential feature of good governance (Kaufman et al., 1999, 2002). In Russia, there is potentially a higher chance that the longer serving governors with their longer serving teams had been able to establish a system of rules and agreements amounting to a working administrative system that can provide businesses with a more predictable operating environment and greater policy stability.

However, it is also plausible to suggest that gubernatorial tenure and, possibly, a greater informal institutionalization linked to a governor's lengthier stay in power might be associated with more bribes and greater corruption as well as a higher degree of 'state capture,' normally considered a negative factor for the business environment. This has been discussed in many country contexts, including that of Russia, using the 'grabbing hand' model of the government (Frye and Shleifer 1997; Shleifer and Vishny 2002; Dalgic and Van Long 2006). Therefore, the effect of administrative continuity associated with gubernatorial tenure in office on business climate – actual and perceived – is a matter for empirical testing in this study.

Based on the above discussion, the first hypothesis in this study is that *regional business environment is shaped by administrative continuity determined by gubernatorial tenure*. Specifically, our first conjecture is that *administrative continuity is associated with the more*

predictable regional business environment and more content economic actors. The alternative hypothesis is that the adverse effects of increasing corruption associated with administrative continuity are likely to increase business actors' discontent.

There is another factor associated with the figure of the regional governor that might be important for business environment from the perspective of predictability and lower degree of uncertainty – a governor's *local roots*, that is, the degree to which she or he is a regional insider, a local politician who made his or her career within the region; or an outsider brought into the region by the Kremlin. Governors with preexisting ties to and in the region would have had a greater opportunity to be part of and forge further mutually-beneficial inter-elite exchange relationships that have been found important for the regional business environment (Podvintsev 2009, Yakovlev 2011), while the outsiders can develop such relations only provided time and political skills. This factor was made relevant in 2005, when the gubernatorial selection mechanism changed from election-based to appointment-based and the Kremlin, faced with problems of availability of acceptable local cadre or other political issues, made decisions to appoint '*varyags*' – the commonly used nickname for the governors whose roots lie outside the region, or "governors-outsiders". This factor can arguably be also related to stability and predictability of the regional business environment. The appointment of an outsider to a top administrative position in the region might result in a 'disequilibration,' an unsettlement of regional-level informal networks and arrangements. Governors-outsiders lack social and political capital in the region, are not familiar with local 'heavyweights' and brokers, lack local knowledge that might be helpful in inter-elite interaction, and therefore are at a disadvantage when compared to regional insiders. Governors-outsiders also tend to bring in other outsiders into the region to join their administrative team. The key members of their teams are usually individuals that come along with them, thus causing greater anxiety and uncertainty among the local elites. Russian regional analysts have developed a widely shared consensus that governors-*varyags* were frequently ineffective because they lacked the necessary knowledge, connections and support base in the region.[4] There are very few exceptions to this rule. Of course, after a while, outsiders might *become*

[4] For an illuminating case study of Samara oblast, see Chirikova (2011). Also, see Podvintsev (2009).

insiders, and, given time, political skill, and favorable conditions, governors who initially lacked local knowledge and local social and political capital might gain these resources. Therefore, it appears plausible to suggest that if outsider-governors persevere through the initial difficulties and forge working relationships with regional elites, the disadvantages they faced initially will dissipate with time. Hence, the outsider status is likely to be especially disruptive for the regional business environment in the early stages of the outsider-governors' careers in the region.

The second hypothesis, therefore, is that *in regions with local governors firms are more satisfied with the regional business environment than in regions with governors-outsiders. The difference in (dis)satisfaction levels, however, diminishes with outsider-governors' tenure.*

3. Empirical Specification

The empirical specification adopted in this study is based on the econometric model with latent variables, which takes a general form of

$$y^* = x'\beta + z'\gamma + \epsilon, \quad (1)$$

where y^* is the exact but unobserved dependent variable (in BEEPS case for example, respondents' exact level of dissatisfaction with various obstacles related to business environment);
x is the vector of variables related to administrative continuity and regional authorities' local roots, z is the vector of other control variables that explain the business environment and the quality of state-business relations in Russian regions, and β and γ are the vectors of regression coefficients, which we wish to estimate.

The base model specification includes a variable for measuring governor's origin, a firm-specific measure of governor tenure and the following control variables: firm age, size, sector, ownership, gross regional product (GRP) composition (construction, retail, and extractive sectors as a percentage of GRP); log of regional GRP; population density; and regional shares of state-owned and privately owned enterprises. These controls are

selected based on earlier studies that have demonstrated these factors to be associated with firms' perceptions of business environment (Dollar et al. 2005; Ayyagari et al. 2008; Eifert et al. 2008). In addition, as the experiences of local business environment for firms that have experienced the change of regional administration are likely different from those who did not, we include a treatment binary variable for whether the firm has experienced a change in regional governor.

To estimate the econometric model characterized by equation (1) we employ three different methods for analyzing limited dependent variable (DV) data. The continuous limited DVs, such as, for example, the number of days necessary to obtain an operating license or the size of informal payments as the percentage of annual sales are estimated using the Heckman selection model that allows for correcting the sample selection bias introduced by responses such as 'don't know' or 'refuse to answer'. The default estimation method is maximum likelihood. If the model does not converge, the original two-step method is applied (Statacorp 2015b, p. 400). An instrumental variable used in the first stage is the quality of firms' bookkeeping records (as reported by the interviewers). It is negatively correlated with 'don't know' answers and assumed not correlated with the unobserved endogenous latent variable (for example, the respondents' sensitivity to questions due to their political connections).[5] To avoid model misspecification, in the first stage we also include a number of control variables that can affect the robustness of our chosen instrument, such as, for example, presence of females in firm's ownership and top management, years of experience of firms' top manager, and the presence of internationally recognized quality certification. The binary limited DVs such as 'did you apply for a government contract' (yes/no answers) are estimated by the logit model. The ranked limited DVs are estimated using an ordered logit model that allow for analyzing non-uniform intervals in observed outcomes. For all three methods, robust standard errors allowing for clustered correlations by region, industry, and size are estimated. All three methods are estimated using STATA 14 statistical software (StataCorp, 2015a).

[5] We make this assumption because there is no reason to believe that the presence of political connections, which presumably underlies respondents' sensitivity to answering certain questions, should be linked to the quality of bookkeeping, which is rather determined by the quality of accountant and the properties of the sector a firm operates in. Conceptually, the reliance on political connections – at the firm *owner* level – is not likely to be directly linked to *operational* level accounting in any systematic manner.

As regards identification issues, a potentially confounding problem is that we assume exogeneity of gubernatorial tenure and origin with respect to unobserved factors associated with the regional business environment. This assumption is largely supported by the studies of gubernatorial appointment patterns in Russia that point out the importance of *political loyalty* indicators measured through electoral performance of United Russia, a party of power, and unrelated to economic competence and economic performance indicators (Reuter and Robertson 2012). Given further empirical explorations into vote mobilization techniques in Russia, we suggest, with a reasonable degree of confidence, that regional business environment and institutional quality are not associated with vote mobilization and therefore cannot be expected to influence gubernatorial tenure (Frye, Reuter and Szakonyi 2014). Additionally, empirical evidence shows that regional businesses' mobilization capacity is heavily circumscribed by the state authorities (Yakovlev et al. 2014), which makes the potential reverse causality associated with business actors reacting to sub-par business climate and affecting administrative continuity unlikely.

4. Data

The analysis of the business environment and the quality of state-business relations in Russian regions in this study relies on the conceptualization of state-business relations used in the Business Environment and Enterprise Performance Survey (BEEPS) implemented by the World Bank and the EBRD. The latest 2011 round of BEEPS for the Russian Federation was for the first time designed to be representative of Russian regions and provides the most systematic instrument available today for measuring regional variation in state-business relations in Russia in the last few years. A total of 4220 firms were surveyed across 37 regions with approximately 120 firms per region. The survey allows for treating Russian regions[6] as a natural laboratory for studying state-business relations, which is beneficial both analytically and policy-wise. Analytically, it allows us to avoid country-specific heterogeneities (such as historical legacies, national institutions, and

6 In the period studied the Russian Federation was divided into 83 federal subjects (constituent units) including 21 republics, 9 krais, 46 oblasts, 2 federal cities, 1 autonomous oblast and 4 autonomous okrugs. For the purposes of this paper, all these federal subjects are called "regions".

policies), common in cross-country research. The recent proliferation of subnational level research in political science and economics is one of the indications of these advantages (Tsai and Ziblatt 2010). From a policy-making perspective, it is important to investigate regional-level variation because regional governments and institutions influence the business climate and regional development in Russia (Rodríguez-Pose 2013).

The survey combines perception and experience-based questions designed to explore patterns of interaction between firms and state actors across a variety of spheres. Respondents – senior managers – were asked, among other things, to assess the importance to their firms' operation of sixteen governance and administrative obstacles such as corruption, access to land and finance, labor regulations, and informal competition. The survey questions were conceptualized to also serve as measures of administrative corruption and state capture across Russian regions.[7]

The explanatory variables of main interest, as discussed above, comprise two indicators associated with regional executive chiefs. *Administrative continuity* is constructed by calculating the number of months a governor was in office at the time each firm was interviewed.[8] In regression specifications described below this variable was expressed as a logarithm to allow for elasticity interpretation. A *Regional Authorities' Local Roots* dummy variable assigns 1 to regions run by governors who are regional insiders and 0 to outsiders. The coding of this variable was based on the analysis of regional governors' biographies and involved a determination of whether the individual in question has had his career progress in the region. The insider-governors had either had all of their careers made in the region or spent more than three years occupying top positions in the regional government or leading regional enterprises in the regions where they've become governors.[9] To preserve space we report the summary descriptive statistics only for these

[7] For a summary descriptive statistics of these variables see Tables A4.1 - A4.7 in the online appendix.

[8] We used months instead of years to obtain a more accurate and continuous measure of tenure.

[9] For example, even if a governor was not originally from a particular region but occupied such official positions as the post of a deputy governor, or worked as a manager/director of a large regional enterprise, then he was treated for the purposes of this study as an insider because he had time to build that local knowledge and social capital. On the other hand, if a newly appointed governor was born and studied in a particular region but built the main stages of his career elsewhere, for the purposes of this study he is treated as an outsider because such individual can not be expected to be embedded in local elite networks.

two key variables (see Tables A1 and A2 in the online appendix). Further information describing other firm-level variables used to construct the data is available in Kisunko and Knack (2013). The data for other, non firm-level, control variables came from the Federal State Statistics Service of the Russian Federation (2015).

Limitations of the data used in this study are mostly related to data characteristics and operationalization issues. Perhaps the most important data limitation is the selection bias engrained in the survey. According to the EBRD (2012), only 22 percent of contacted firms were surveyed. About half (56 percent) of the contacted firms refused to participate, and some firms were found ineligible to take the survey because of the sampling requirements. An additional concern is that the survey can only be conducted with those firms that have survived in Russia's challenging institutional environment. This means that the composition of firms surveyed across different rounds of BEEPS, including the last 2011 round, is likely to be qualitatively different. In short, there is a 'success' bias in the data and BEEPS does not provide any information on firms that have exited the regional economy or have gone informal. Moreover, given the complexities of doing business in Russia, no survey, even as comprehensive as BEEPS, can capture all factors that could be perceived as obstacles as well as factors that may be necessary for success when doing business in various Russian regions; a number of the BEEPS questions might have been perceived as too sensitive by top managers, presumably concerned with potential political fallout; therefore, there are grounds to question the accuracy of specific responses.[10]

5. Results

Tables 1-3 present estimation results of the empirical specification (1) for different measures of firms' experiences of the business environment. The results in the Tables 1-3 are organized in accordance with three broad aspects of the regional business environment: regulatory and legal institutions, structural characteristics and external obstacles, and administrative corruption and state capture. To preserve space, we report estimated coefficients for two key variables of interest (governor's tenure and insider origin), with full estimation results reported in the online appendix.

[10] This might be especially true for questions about the share and particular amounts of informal payments and gifts given to get things done.

Administrative continuity plays a significant role in shaping firms' perceptions of the business environment in Russia. The results of the econometric analysis demonstrate rather convincingly that longer governor tenure is associated with the amelioration of firms' perceptions of most regulatory obstacles to business operation measured by BEEPS. Specifically, on customs and trade regulations, tax administration, business licensing and permits, courts, and labor regulations, firms in regions with longer serving governors express less concern than in regions where governors have shorter tenure (Table 1). Longer governor tenure is also associated with lower regulatory burden. A 100 percent increase in governor tenure (that is, if tenure doubles) corresponds to an 8.3 percent decline in managers' time spent on regulations, and a 6.8 percent declines in the number of tax inspections and a number of days required to get an operating license (Table 1).

Table 1: Impact of Regional Political Factors on Firms' Experience and Perceptions of Regulatory and Legal Authorities

	Model	Tenure		Insider Origin	
		coeff.	s.e.	coeff.	s.e.
The extent to which these issue areas are perceived as an obstacle to firms' operation:					
Tax administration	Ologit	-0.17***	0.061	-0.302***	0.104
Courts	Ologit	-0.15*	0.08	-0.405***	0.132
Business licensing and permits	Ologit	-0.322***	0.067	-0.323***	0.107
Customs and trade regulations	Ologit	-0.315***	0.081	-0.141	0.123
Labor regulations	Ologit	-0.302***	0.074	-0.265**	0.116
Regulatory burden:					
Manager time spent on regulations	Heckit	-0.083***	0.011	-0.075***	0.016
Number of tax inspections last year	Heckit	-0.068***	0.018	-0.041	0.031
Number of days to get operating license	Heckit	-0.068***	0.028	-0.098***	0.045

Notes. *** p<0.01, ** p<0.05, * p<0.1. Ologit: ordered logit model. Heckit: Heckman selection model. Estimated coefficients for Heckit and Logit models are converted to marginal effects. Estimated coefficients for Ologit models are shown as is. Firm-level control variables (reported in the online appendix) include firms' size, age, sector, exporter status, foreign and state ownership, and experience of governor's change. Regional control variables (reported in the online appendix) include natural logarithm of gross regional product (GRP) in 2010, shares of construction, retail, and natural resources in GRP, the share of Russian speakers, and population density.

As regards such external obstacles as access to land, lack of skilled and educated workers, and crime/theft/disorder in the region, we observe the same relationship with firms complaining less about these factors in regions with longer serving governors (Table 2). Only for one obstacle – tax rates – the analysis shows a statistically significant positive

impact of long tenure. This exception appears to be an exception that proves the rule. Tax rates are the most generic concern for all the businesses around the world and they can arguably dominate in the situations when other concerns – especially those related to state officials - are relatively insignificant.

Table 2. Impact of Regional Political Factors on Firms' Perceptions of Regional Structural Characteristics and External Obstacles

The extent to which these issue areas are perceived as obstacle to firms' operation	Model	Tenure		Insider Origin	
		coeff	s.e.	coeff	s.e.
Access to land	Ologit	-0.178**	0.07	-0.4***	0.1
Access to finance	Ologit	-0.11*	0.057	-0.206**	0.086
Crime/theft/disorder	Ologit	-0.3***	0.064	-0.479***	0.107
Informal competition	Ologit	-0.023	0.067	-0.406***	0.102
Tax rates	Ologit	0.11**	0.05	0.038	0.08
Uneducated workforce	Ologit	-0.159***	0.059	-0.354***	0.099

Notes. *** p<0.01, ** p<0.05, * p<0.1. Ologit: ordered logit model. Heckit: Heckman selection model. Estimated coefficients for Heckit and Logit models are converted to marginal effects. Estimated coefficients for Ologit models are shown as is. Firm-level control variables (reported in the online appendix) include firms' size, age, sector, exporter status, foreign and state ownership, and experience of governor's change. Regional control variables (reported in the online appendix) include natural logarithm of gross regional product (GRP) in 2010, shares of construction, retail, and natural resources in GRP, share of Russian speakers, and population density.

The results are not as clear when it comes to the issue of corruption. Longer governor tenure is associated with more informal payments expected at tax meetings and needed to obtain construction permit and operating license although none of these effects is statistically significant (Table 3). At the same time, longer governor tenure yields lower percentage of annual sales paid in informal payments (Table 3). This effect is not only statistically significant but is also quite substantial in size. Thus, a doubling in governor tenure produces around .058 percentage points decline in the reported share of sales paid in informal payments to various authorities to 'get things done'.[11] In regions with longer gubernatorial tenure firms also report less need for them when dealing with customs and imports, courts, and tax collection (Table 3). And longer tenure is associated with lesser propensity for firms to complain on a more generic question about informal payments needed 'to get things done with regard to customs, taxes, licenses, regulations, etc.'

[11] Given the average of 1.06 percent of annual sales paid as informal payments on average for 4220 firms, -.058 appears as an effect worthy of consideration.

There are some additional indicators that the amount of corruption might be growing with administrative continuity. BEEPS obtained firms' responses to a series of vignettes describing a corruption situation in an imaginary town/village with one town featuring a no bribes case and four other towns featuring different combinations of corruption-efficiency scale. On all but the 'free-of-bribery' case, longer governor tenure is associated with firms' greater perceptions of corruption as an obstacle (see Tables A5.28-A5.32 in the appendix). When asked more directly about corruption as an obstacle, firms once again give somewhat different responses. While tenure does not seem to have statistically significant effect on firms' opinions about corruption as an obstacle to their operations, firms in regions with longer serving governors tend to choose corruption as their 'number one obstacle' less often (see Table 3). It might be that corruption growth in regions with longer serving governors does not turn into a source of intense complaints for firms operating in these regions. That firms in such regions tend to report less state capture also supports this interpretation. A sensitivity analysis presented below will reveal that some of these findings are driven by relationships in more particular firm cohorts.

Table 3. Impact of Regional Political Factors on Firms' Experience with and Perceptions of Administrative Corruption and State Capture

	Model	Tenure		Insider Origin	
		coeff	s.e.	coeff	s.e.
Informal payments					
When dealing with customs/imports	Ologit	-0.297***	0.085	-0.737***	0.131
When dealing with courts	Ologit	-0.313***	0.077	-0.939***	0.122
When dealing with taxes/tax collection	Ologit	-0.152**	0.069	-0.931***	0.113
When getting a construction permit	Logit	0.021	0.033	-0.065	0.06
When getting an operating license	Logit	0.021	0.016	-0.044	0.027
Expected at tax meetings	Logit	0.048	0.007	-0.027**	0.012
% of annual sales paid in informal payments	Heckit	-0.058**	0.028	-0.074	0.05
'it is common to pay informal payments to get things done with regard to customs, taxes, licenses, regulations, etc.'	Ologit	-0.206***	0.057	-0.942***	0.094
State capture					
Private payments to parliamentarians have an impact	Ologit	-0.193**	0.093	-1.049***	0.148
Private payments to government officials have an impact	Ologit	-0.245**	0.088	-0.984***	0.142
Private payments to regional officials have an impact	Ologit	-0.237***	0.075	-0.857***	0.13
Corruption					
As an obstacle	Ologit	-0.08	0.057	-0.205**	0.090

As number 1 obstacle	Logit	-0.013**	0.006	-0.02*	0.011

Notes. *** p<0.01, ** p<0.05, * p<0.1. Ologit: ordered logit model. Heckit: Heckman selection model. Estimated coefficients for Heckit and Logit models are converted to marginal effects. Estimated coefficients for Ologit models are shown as is. Firm-level control variables (reported in online appendix) include firms' size, age, sector, exporter status, foreign and state ownership, and experience of governor's change. Regional control variables (reported in online appendix) include natural logarithm of gross regional product (GRP) in 2010, shares of construction, retail, and natural resources in GRP, share of Russian speakers, and population density.

The *governor origin* variable highlighted the numerous benefits associated with governors-insiders, as perceived by firms. Almost all regulatory obstacles and, specifically, tax administration, business licensing, labor regulations and courts are seen as less of an obstacle in regions with insider-governors than in regions with governors-outsiders (Table 1). The same relationship holds on most other potential obstacles such as access to land, access to finance, informal competition, crime/theft/disorder, and inadequately educated workforce (Table 2). Most measures of administrative corruption produce analogous findings. State capture is perceived to be less of an issue in regions with governors-insiders as firms report less impact from private payments to parliamentarians and regional officials in these regions (Table 3). Also, firms in regions with insider governors tend to admit less to the necessity of informal payments 'to get things done' in general and in dealing with customs, courts and the tax authorities, in particular (Table 3). They report fewer bribes needed to be paid at tax meetings (by 2.7 percent), for getting an operating license (by 4.4 percent) and construction permits (by 6.5 percent), although the latter two effects are not statistically significant (Table 3). The actual weight of informal payments as a percentage of annual sales is also lower in regions with insider governors (by .74 percentage points given the average of 1.06 percent), although it is not statistically significant (Table 3). In short, with regard to governor origin, the results consistently privilege insider governors as reflected in firms' more favorable perceptions of the various aspects of regional business environment.

6. Sensitivity Analysis

To account for possibly non-linear effects of administrative continuity (that is, relationships that are sometimes driven by the regions with very short- or very long-serving governors), we conduct additional robustness checks. The first one involves adding four tenure dummy variables based on quartile distributions (see summary statistics in Table A3 in the online appendix). In addition, we use a quadratic function to

test for potentially 'U' shaped relationships. The results for both of these checks are reported in the online appendix; they confirm that controlling for other factors, the impact of administrative continuity is not always linear and the relationships are sometimes driven by the regions with very short- or very long-serving governors, and sometimes even change twice going from short tenure, to medium and then to long tenure. Below we discuss the results based on specification with dummy variables that consistently produced better goodness of fit as compared to quadratic function.

The sensitivity analysis produces interesting findings confirming more casual expert observations regarding how businesses operate in Russia. Perhaps the most important and most consistent finding is in relation to firms' complaints in regions with recently appointed governors. Such firms report a significantly higher (0.14 percentage points) actual bribes paid as a percentage of total sales (Table A5.1 in the online appendix). Similarly, their expectations of frequent bribes to get things done in various spheres are significantly higher (Tables A5.19-A5.22 in the online appendix). They also complain most intensely about state capture and the impact from informal payments to government officials, parliamentarians, and local and regional officials (Tables A5.23-5.25 in the online appendix). They experience a significantly higher incidence of tax inspections (Table A5.3 in the online appendix) and are most discontent on various other issues including access to finance, tax administration, labor regulations, business licensing and permits, customs and trade regulations, crime/theft/disorder, and uneducated workforce (Tables A5.9, A5.11, A5.13, A5.15-A5.16, A5.26-A5.27 in the online appendix). A very high consistency of findings associated with the 'negativity' of firms of the first quartile is hardly accidental. It results, arguably, from at least two distinct sources. First, the findings related to bribes might be a reflection of a more fragmented nature of corruption in a region undergoing political transition and the need for more, smaller bribes expected by various agencies not yet incorporated into a region-wide pyramid of power.[12] The findings on other indicators, on the other hand, might reflect an acute sense of insecurity and vulnerability that firms face in the period of political and regulatory transition. High levels of uncertainty under a changing regional administration could translate into a greater discontent on the part of

[12] On fragmented versus centralized corruption, see Shleifer and Vishny (1993).

regional businesses, which frequently rely on informal links to get things done. Building such links and relationships takes time, effort and resources. The appointment of a new governor means that firms' previous efforts to build good relationships with the regional administration might have been wasted and they need to start from square one, meanwhile facing the uncertainty about their future.

The second important observation from the sensitivity analysis concerns the relatively outsized level of content on some issues expressed by firms in the regions with the longest serving governors. Thus, on the issue of access to land and informal competition as an obstacle firms in regions with the longest serving governors appear much more content compared to other firms (Tables A5.10 and A5.12 in the online appendix). It is not surprising and arguably reflects the selection process through which these firms have undergone already; their survival indicates the strength of their informal connections to the gubernatorial team in the first place.

There is some indication that the amount of corruption might grow with gubernatorial tenure, as discussed earlier. Thus, in regions with more recently-appointed governors there is a lower probability (7.3 percent) for firms to expect informal payments to get operating license (Table A6.2 in the online appendix), while the probability of informal payments expected to get construction permit is significantly higher (24.4 percent) for firms in regions with longer serving governors (specifically in the 3rd quartile, see Table A6.2 in the online appendix). Additionally, firms in regions with recently appointed governors are less likely to view corruption as an obstacle to their operations when they perceive regional administration as corrupt and bribes do increase the chances of getting things done (Tables A5.31-A5.32 in the online appendix).

With regard to governor's origin, as discussed earlier, there are grounds to suspect that its impact might be mitigated by the time a governor-outsider spends in office. It seems plausible to expect, for example, that given time and skills, some outsiders might be able to develop effective coalitions with business actors in their regions making them more comparable with insiders (that is, the insider-outsider gap might lessen with tenure). Hence, the difference between insider and outsider governors might lessen with time. To

test for that hypothesis we add the multiplicative interaction term between variables of governor origin and governor tenure.[13]

This indicator testing for the effect of origin with changing tenure produced interesting results adding further nuance to our understanding of how things work in Russia's regions. Specifically, on issues of tax administration, crime/theft/disorder, business licensing and courts as obstacles, as well as state capture and frequency of bribes to courts and tax collections, our hypothesis about tenure working in favor of outsider governors is upheld (Tables A5.13, A5.15-A5.16, A5.18, A5.21-A5.22, A5.23-A5.25 in the online appendix). The model reveals advantages associated with insider-governors at short tenure but, at long tenure, firms' perceptions of these issues are either more favorable or display more positive trends in regions with outsider governors. This confirms our intuition that with time outsider governors can, so to say, prove themselves and even outperform insiders on selected indicators of business climate. These results should not be surprising. Given the difficulties faced by outsiders in navigating and constructing effective inter-elite relationships in the regions, it is plausible to expect that only the more politically skillful outsiders are likely to stay in the region for long.

Nonetheless, this finding does not apply to all indicators. Access to land and tax rates are perceived to be higher obstacles to business operations for insider governors with a short tenure and diminish in their importance as insider governors' tenure increases (Tables A5.10 and A5.14 in the online appendix). The number of days to get operating license tends to decline faster with governors' tenure in insider-controlled regions (Table A5.4 in the online appendix). And the length of tenure of the insider governors is associated with lower corruption perceptions in the regions (Tables A5.30-A5.32 in the online appendix).

7. Discussion and Concluding Remarks

The institutional business environment in Russia is notoriously challenging and has long been characterized by high risks of predation from both the state officials and private

[13] Ai and Norton (2003) showed that interaction terms in non-linear models, such as logit or ordered logit cannot be interpreted similarly to interaction terms in linear models. To ensure tractability of interaction term in these non-linear models similar to linear models, we code the interaction term in STATA using # operator, as shown by Pinzon (2016).

actors as well as by lacking infrastructure and widespread corruption. Such an environment does not reward economic efficiency and fair competition but promotes links to and dependence on the state. The role of regional executive authority in such business environment is critical. This study of regional variation in business climate in Russia highlights the role of regional governors along with their teams and administrative stability for business climate in Russia's regions. As expected, Russian firms reveal a strong preference for a more stable and predictable environment and intense dislike of political change on the regional level that is shaped by the continuity of regional administration. Additionally, they have shown strong preference for locally-embedded authorities arguably reflecting the significance of the local social capital and pre-existing inter-elite connections for state-business relations in the regions.

The central finding of this study about the significance of administrative continuity for broader institutional environment and business climate in Russia's regions is supported by other recent studies. Bruno et al. (2013), for example, have demonstrated that industries normally characterized by low entry barriers have lower entry rates in regions characterized by greater political discontinuity. This effect is especially pronounced for medium and large firms that are more likely to depend on access to administrative resources and personal links to government officials. The level of complaints associated with firms in regions of the first quartile, as discussed in our analysis, therefore should be taken seriously -- the complaints are accompanied by falling new firms entry rates into the regional economy.

The significance of governor origin and the benefits of having a local governor revealed in the study arguably highlight further the importance of personalized exchange relations and informal links possessed by locals but not by outsiders. The lower perceptions of most obstacles to business associated with local governors combined with more favorable perceptions about corruption and lower perceptions of state capture (especially at short tenure) are also indicative of the likely selection and adaptation processes the regional firms have undergone under local governors. It seems plausible to suggest that *varyags*, given their executive powers and the lack of local knowledge and local connections, threaten to dismantle whatever arrangements that have emerged in the regions and thus

be a source of acute insecurity for local business actors. It might also indicate that the firms that have been pessimistic on corruption issues all along would expect higher corruption margins from the outsider governors just because they are an 'unknown evil' as compared to the 'known local evil.' In such circumstances, one may expect that firms' insecurities would be reflected in their unhappiness with the state of corruption, state capture, and more generally the operation of any state agency they interact with. Skillful outsiders can integrate into regional elite with time. On almost all obstacle indicators outsider governors with long tenure are associated with more positive trends than insider governors. Such shifting perceptions might, on the one hand, reflect a much higher degree of anxiety firms experience when the feared political transition is combined with an unknown person brought to power. When the 'unknown evil' turns into a known governor who can constructively engage with regional businesses, firms' perceptions of many obstacles change positively. However, this may also reflect the tougher requirements applied to the outsider governors wishing to keep their positions. It is easier for the local elites to purge outsiders, which means that those surviving are more capable of 'getting things done.' This gets captured through the firms' more favorable perceptions of local business environment.

The sensitivity analysis of the non-linear effect of gubernatorial tenure informs further that a simple conclusion about the benefits of a longer gubernatorial stay in power on business climate would be inaccurate. The analysis of the effect of tenure broken into quartiles reveals that firms display an unusually high degree of discontent associated with very short tenure. The levels of complaints emerging from the regions that have undergone political discontinuity as expressed through gubernatorial change (firms from the regions of the first quartile in tenure, where governors have served under one year) are by far higher than in any other regions. This initial anxiety seems to go away quickly because, in regions with governors serving between one and three years (second quartile), firms display higher confidence on many issues. As discussed above, the causes of such anxiety might be on the surface. In the larger environment characterized by the prevalence of personal relations and arbitrary application of formal rules and regulations, the situation of political shake-up throws all the previous agreements and relationships in the air, producing uncertainty and unpredictability for economic actors. Many of these firms depend on the

good will of the regional administration for obtaining licenses, construction permits and going through various other bureaucratic hurdles associated with doing business in Russia. Some might rely on political connections to benefit from government-funded contracts and projects. Therefore, political transitions raise truly 'existential' threats to businesses and the firms' answers to survey questions reveal that. Additionally, administrative discontinuity is likely to result in policy inconsistency, a factor that has been shown to be directly linked to firm growth and well-being (Ayyagari et al. 2008).

The analysis produces a more mixed picture on corruption. On the one hand, firms report higher real and perceived corruption levels in regions with shorter-tenured governors, which might be reflective not only of perceived risks associated with political transitions but also of a more fragmented nature of political authority in such regions and, hence, a more decentralized and pernicious corruption firms react against. At the same time, in some important areas of economic activity administrative continuity comes at a price and longer tenure means increasing corruption levels. This applies specifically to the construction sector as firms in regions with longer serving governors report significantly higher expectations of the need for informal payments to get construction permits. Nonetheless, on most other business environment indicators administrative continuity is associated with more content firms. It could be suggested that administrative continuity results in such a symbiosis between the regional government and businesses and such a degree of habituation to corruption patterns that the firms in regions where governors are serving more than ten years appreciate the predictability and the potential support of regional authorities so that corruption is seen as an additional tax on production (which all of them tend to complain about anyway). Their very existence as firms on the regional scene might be indicative of their access to and dependence on administrative resources, which they would want to defend and use against potential challengers. In such circumstances, close links between these firms and the government would work to exclude competitors from entering the market.

What should policy-making priorities be in such a crony capitalist environment? The central question arguably is whether this institutional environment underpinning firms' operation is amenable to change in a wholesale fashion. If such comprehensive reforms are

not conceivable in the short-term, whether for the lack of political will or the absence of a clear template for such reforms, a policy-maker might find it more useful to support economic development in the sub-optimal conditions of crony capitalism, in the hopes that such economic growth – if provisions are made for it to be equitable - might create new social conditions that would allow for the creation of a broadly-based political coalition promoting institutional changes. In such a scenario, it would be imperative to study more in-depth the particular economic success cases and try to discern the underpinnings of these successes. For example, getting access to federal funds in support of regional projects appears to be one of the means for bolstering regional governors' support and recognition from regional economic elites. An exploration of lobbying strategies of regional elites and another rationale behind intergovernmental transfers, especially the part of transfers that is more politically sensitive, might provide further clues to regional success cases.

Another promising research direction is the assessment of regional bureaucratic capacity and rule-making and their effects on regional economic prospects and business environment. These factors might be especially important for small business development, an underdeveloped sector in Russia (Beazer and Duvanova 2014). Additionally, it might be worthwhile to consider more 'piecemeal' reforms to some of the outstanding problems of the existing institutional order in Russia. Finding ways to reduce corruption levels while keeping the benefits of political stability might be a challenging task, but one that brings significant benefits to regions that managed to achieve it and therefore worthwhile of further exploration.

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ONLINE APPENDIX

Table A1: Descriptive Statistics for Key Explanatory Variables (BEEPS regions)

Region	*Governor Tenure* (months)*	*Governor Origin***		*Region*	*Governor Tenure (months)*	*Governor Origin**
Bashkortostan	16	0		Novosibirsk oblast	14	1
Belgorod oblast	214	1		Omsk oblast	240	1
Chelyabinsk oblast	19	1		Perm krai	69	1
Irkutsk oblast	28	0		Primorskii krai	124	1
Kaliningrad oblast	14	1		Rostov oblast	17	0
Kaluga oblast	134	1		Sakha (Yakutia)	18	1
Kemerovo oblast	175	1		Samara oblast	49	0
Khabarovsk krai	31	1		Smolensk oblast	47	1
Kirov oblast	36	0		St. Petersburg	97	0
Krasnodar krai	131	1		Stavropol krai	41	1
Krasnoyarsk krai	22	1		Sverdlovsk oblast	25	0
Kursk oblast	132	1		Tatarstan	19	1
Leningrad oblast	148	1		Tomsk oblast	192	1
Lipetsk oblast	164	1		Tver oblast	96	0
Mordovia	194	1		Ulyanovsk oblast	84	1
Moscow city	14	0		Volgograd oblast	24	1
Moscow oblast	142	0		Voronezh oblast	31	0
Murmansk oblast	34	0		Yaroslavl oblast	47	1
Nizhny Novgorod	65	0				

Notes:
* - mean over a range of firm interview dates in each region
** - regional insiders are coded 1; regional outsiders are coded 0.

Table A2 Correlation Matrix

	Governor Tenure	Governor Origin
Governor Tenure	1	
Governor Origin	0.22**	1

Table A3 Governor Tenure Quartile Distribution

Quartile	Tenure (months)
1	10-23
2	24-47
3	48-134
4	135-244

Table A4.1 – Continuous indicators of business environment

	Total Obs	*Censored Obs*		*Uncensored Obs*	
		N	Percent	Mean	Std. Dev.
% of total annual sales paid as informal payment/gift (j7a)	4132	854	20.6%	0.9	4.0
% of manager time spent on regulations (j2)	4220	460	10.9%	17.36	21.51
Number of tax inspections, last year (j4)	2083	149	7.15%	2.88	4.16
Number of days to get operating license (j14)	944	69	7.3%	53.2	65.2

Note. Censored observations include such answers as 'Don't know" and "Refused to answer"

Table A4.2 - Yes / No questions

	N	Mean	Std. Dev.
Received subsidies from the national, regional, local government or the EU sources (ECAq53)	4182	0.04	0.20
Informal payments expected at tax meetings (j5)	1948	0.04	0.20
Informal payment expected to get an operating license (j15)	906	0.09	0.29
Informal payment expected to get construction permit (g4)	394	0.24	0.43
Corruption is number 1 obstacle (m1adum6)	4220	0.07	0.26

Table A4.3 - obstacles to Firms' Operations

		Does not apply	No obstacle	Minor obstacle	Moderate obstacle	Major obstacle	Very severe obstacle	Total
Customs and trade regulations (d30b)	N	724	2,492	240	320	239	129	4144
	Percent	17.47	60.14	5.79	7.72	5.77	3.11	100
Access to land (g30a)	N	367	2,463	253	353	376	273	4085
	Percent	8.98	60.29	6.19	8.64	9.2	6.68	99.98
Access to finance (k30a)	N	37	1,699	633	805	641	303	4118
	Percent	0.9	41.26	15.37	19.55	15.57	7.36	100.01
Crime, theft and disorder (i30)	N	98	2,474	687	448	326	161	4,194
	Percent	2.34	58.99	16.38	10.68	7.77	3.84	100
Tax rates (j30a)	N	0	524	323	915	1,345	1,064	4,171
	Percent	0	12.56	7.74	21.94	32.25	25.51	100
Tax administration (j30b)	N	2	2,174	724	729	360	187	4,176
	Percent	0.05	52.06	17.34	17.46	8.62	4.48	100
Business licensing and permits (j30c)	N	353	2,558	330	365	346	204	4,156
	Percent	8.49	61.55	7.94	8.78	8.33	4.91	100
Political instability (j30e)	N	0	1,766	570	791	670	293	4,128
	Percent	0	42.78	13.81	19.16	16.23	7.1	100
Corruption (j30f)	N	65	1,745	507	642	668	407	4,034
	Percent	1.61	43.26	12.57	15.91	16.56	10.09	100
Courts (h30)	N	136	2,987	372	300	215	78	4,088

	Percent	3.33	73.07	9.1	7.34	5.26	1.91	100
Labor regulations (l30a)	N	4	2,901	543	496	195	51	4,190
	Percent	0.1	69.24	12.96	11.84	4.65	1.22	100
Uneducated workforce (l30b)	N	21	1,781	584	765	723	313	4,187
	Percent	0.5	42.54	13.95	18.27	17.27	7.48	100

Table A4.4 – Vignette questions

		Does not apply	No obstacle	Minor obstacle	Moderate obstacle	Major obstacle	Very severe obstacle	Total
vin1a	N	109	1,011	1,013	945	521	183	3,782
	Percent	2.88	26.73	26.78	24.99	13.78	4.84	100
vin1b	N	108	918	746	1,109	711	205	3,797
	Percent	2.84	24.18	19.65	29.21	18.73	5.4	100
vin1c	N	113	192	270	700	1,260	1,269	3,804
	Percent	2.97	5.05	7.1	18.4	33.12	33.36	100
vin1d	N	115	275	364	922	1,299	827	3,802
	Percent	3.02	7.23	9.57	24.25	34.17	21.75	100
vin1e	N	115	196	188	526	1,103	1,623	3,751
	Percent	3.07	5.23	5.01	14.02	29.41	43.27	100

Table A4.5 - Court System Is

	Fair, impartial and uncorrupted (h7a)		Quick (ECAj1b)		Able to enforce its decisions (ECAj1c)	
	N	Percent	N	Percent	N	Percent
Strongly disagree	989	26.09	994	26.34	698	18.62
Tend to disagree	1,527	40.28	1,548	41.02	1,145	30.54
Tend to agree	1,017	26.83	996	26.39	1,477	39.4
Strongly agree	258	6.81	236	6.25	429	11.44
Total	3,791	100	3,774	100	3,749	100

Table A4.6- Informal Payments Expected

	Overall (ECAq39)		Customs / imports (ECAq41a)		Courts (ECAq41b)		Tax collection (ECAq41c)	
	N	Percent	N	Percent	N	Percent	N	Percent
Never	1,686	43.92	2,699	77.14	2,684	75.03	2,522	67.42
Seldom	633	16.49	283	8.09	367	10.26	494	13.21
Sometimes	803	20.92	288	8.23	308	8.61	457	12.22
Frequently	468	12.19	161	4.6	169	4.72	199	5.32
Very frequently	118	3.07	34	0.97	29	0.81	41	1.1
Always	131	3.41	34	0.97	20	0.56	28	0.75
Total	3,839	100	3,499	100	3,577	100	3,741	100

Table A4.7 Impact of Informal Payments to:

	Parliamentarians (ECAq44a)		Government officials (ECAq44b)		Regional / local officials (ECAq44c)	
	N	Percent	N	Percent	N	Percent
Does not apply	636	16.45	648	16.83	526	13.66
No impact	2,469	63.86	2,416	62.75	2,444	63.48
Minor impact	263	6.8	266	6.91	298	7.74
Moderate impact	315	8.15	311	8.08	353	9.17
Major impact	157	4.06	184	4.78	189	4.91
Decisive impact	26	0.67	25	0.65	40	1.04
Total	3,866	100	3,850	100	3,850	100

Table A5.1. Heckit Regressions: % of total annual sales paid as informal payment/gift (j7a)

	Specification I				Specification II				Specification III				Specification IV			
	Main Eq		Selection Eq		Main Eq		Selection Eq		Main Eq		Selection Eq		Main Eq		Selection Eq	
	coef	se	coef	se	coef	se	coef	se	coef	se	coef	se	coef	se	coef	se
Insider Governor: 1 = Yes	-0.074	0.050			0.130	0.211			-0.085*	0.048			-0.076	0.050		
Governor's tenure (log)	-0.058**	0.028			-0.026	0.048										
Governor: origin X tenure					-0.055	0.058										
Governor's tenure: 1st quartile									0.140**	0.069						
Governor's tenure: 2nd quartile									0.044	0.070						
Governor's tenure: 3rd quartile									-0.022	0.060						
Governor's tenure (months)													-0.002	0.001		
Governor's tenure squared (months)													0.000004	0.000005		
size: less than 20 employees	-0.143**	0.057	-0.166**	0.082	-0.145**	0.057	-0.166**	0.082	-0.139**	0.057	-0.166**	0.082	-0.145**	0.057	-0.166**	0.082
size: 20-99 employees	-0.073	0.055	-0.110	0.080	-0.074	0.055	-0.110	0.080	-0.074	0.055	-0.110	0.080	-0.074	0.055	-0.110	0.080
age: 1-6 yrs	0.065	0.055	0.126	0.078	0.065	0.055	0.126	0.078	0.069	0.054	0.127	0.078	0.068	0.056	0.126	0.078
age: 7-9 yrs	0.119**	0.054	0.108	0.078	0.119**	0.054	0.108	0.078	0.118**	0.053	0.108	0.078	0.122**	0.054	0.108	0.078
age: 10-15 yrs	0.014	0.050	-0.050	0.070	0.013	0.049	-0.050	0.070	0.012	0.050	-0.050	0.070	0.014	0.050	-0.050	0.070
exports >5% of sales	-0.040	0.057	0.118	0.088	-0.042	0.057	0.118	0.088	-0.038	0.058	0.118	0.088	-0.040	0.057	0.118	0.088
export status unknown or missing	0.019	0.268	-0.029	0.358	0.008	0.258	-0.029	0.358	0.039	0.269	-0.031	0.358	0.014	0.267	-0.029	0.358
foreign actors own more than 10%	-0.002	0.101	-0.068	0.150	0.008	0.102	-0.068	0.151	-0.015	0.102	-0.068	0.151	-0.000	0.102	-0.069	0.150
state owns more than 10%	0.523***	0.108	-1.072**	0.455	0.540***	0.111	-1.072**	0.455	0.483***	0.110	-1.071**	0.454	0.534***	0.110	-1.072**	0.455
ownership status unknown or missing	0.215	0.160	0.178	0.221	0.214	0.161	0.178	0.221	0.199	0.163	0.178	0.221	0.216	0.160	0.177	0.221
log of GRP for 2010	-0.218*	0.120	0.144	0.153	-0.266**	0.130	0.144	0.153	-0.216*	0.120	0.144	0.153	-0.219*	0.120	0.144	0.153
% self-identifying as Russian	0.004***	0.001	0.007***	0.002	0.004***	0.001	0.007***	0.002	0.005***	0.002	0.007***	0.002	0.004***	0.001	0.007***	0.002
% construction in GRP value-added	0.001	0.006	-0.0004	0.010	0.003	0.007	-0.000	0.010	-0.000	0.007	-0.0004	0.010	0.001	0.006	-0.0004	0.010
% retail in GRP value-added	0.011	0.007	-0.041***	0.009	0.010	0.007	-0.041***	0.009	0.010	0.007	-0.041***	0.009	0.011	0.007	-0.041***	0.009
% natural resource extraction in GRP value-added	0.008*	0.004	-0.018***	0.006	0.009**	0.004	-0.018***	0.006	0.007	0.004	-0.018***	0.006	0.008*	0.004	-0.018***	0.006
sector: light manufacturing	-0.050	0.056	0.014	0.085	-0.044	0.056	0.014	0.085	-0.049	0.056	0.014	0.085	-0.049	0.056	0.014	0.085
sector: heavy manufacturing	-0.037	0.056	-0.013	0.081	-0.031	0.056	-0.013	0.081	-0.035	0.055	-0.013	0.081	-0.036	0.056	-0.013	0.081
sector: machinery and electronics	0.112	0.080	-0.192*	0.104	0.119	0.080	-0.192*	0.104	0.112	0.080	-0.192*	0.104	0.110	0.080	-0.192*	0.104
sector: services	-0.013	0.051	-0.010	0.077	-0.010	0.051	-0.010	0.077	-0.014	0.051	-0.010	0.077	-0.014	0.051	-0.010	0.077
sector: construction	-0.003	0.055	0.073	0.092	-0.001	0.055	0.073	0.092	0.002	0.055	0.072	0.092	-0.002	0.055	0.073	0.092
population per sq. km	-0.000002	0.000032	0.000035	0.000033	0.000007	0.000034	0.000035	0.000033	-0.000002	0.000033	0.000035	0.000033	-0.000002	0.000033	0.000035	0.000033
Experience of Governor Change: 1 = Yes	0.049	0.053	0.205***	0.064	0.040	0.054	0.205***	0.064	0.057	0.052	0.205***	0.064	0.064	0.053	0.205***	0.064
Estimates computed with some precision (1= Yes)			0.146**	0.059			0.144**	0.059			0.147**	0.059			0.145**	0.059
Arbitrary and unreliable numbers (1=Yes)			0.187	0.134			0.185	0.133			0.192	0.135			0.185	0.133
Partially taken from the records and partially estimated: 1=Yes			0.250***	0.087			0.250***	0.087			0.249***	0.086			0.250***	0.087
Amongst the owners of the firm, are there any females? 1 = Yes			-0.027	0.056			-0.027	0.056			-0.027	0.056			-0.027	0.056
Top Manager's number of yrs of experience working in this sector			0.0005	0.003			0.0005	0.003			0.001	0.003			0.0005	0.003
Female Top Manager? 1=Yes			-0.161**	0.067			-0.161**	0.067			-0.162**	0.067			-0.161**	0.067
Have an internationally-recognized quality certification? 1=Yes			0.064	0.075			0.064	0.075			0.064	0.075			0.064	0.075
constant	-6.068***	1.488	-2.616	1.775	-5.599***	1.564	-2.616	1.774	-6.363***	1.474	-2.617	1.775	-6.226***	1.485	-2.615	1.775
Number of observations		4,097				4,097				4,097				4,097		
chi2				.				.				.				.
chi2 (p-value)				.				.				.				.
lambda		-0.134**				-0.133**				-0.138**				-0.131**		
lambda (se)		0.062				0.062				0.061				0.062		

note: *** p<0.01, ** p<0.05, * p<0.1

Table A5.2. Heckit Regressions: manager time spent on regulations (j2)																
	Specification I				Specification II				Specification III				Specification IV			
	Main Eq		Selection Eq		Main Eq		Selection Eq		Main Eq		Selection Eq		Main Eq		Selection Eq	
	coef	se	coef	se	coef	se	coef	se	coef	se	coef	se	coef	se	coef	se
Insider Governor: 1 = Yes	-0.075***	0.016			-0.093	0.077			-0.109***	0.018			-0.094***	0.016		
Governor's tenure (log)	-0.083***	0.011			-0.088***	0.020										
Governor: origin X tenure					0.005	0.020										
Governor's tenure: 1st quartile									0.162***	0.027						
Governor's tenure: 2nd quartile									0.048**	0.023						
Governor's tenure: 3rd quartile									0.030	0.020						
Governor's tenure (months)													-0.004***	0.0005		
Governor's tenure squared (months)													0.00001***	0.000002		
size: less than 20 employees	-0.034	0.028	-0.140	0.092	-0.034	0.028	-0.140	0.092	-0.039	0.028	-0.140	0.092	-0.034	0.027	-0.140	0.092
size: 20-99 employees	-0.013	0.028	-0.115	0.091	-0.013	0.028	-0.115	0.091	-0.017	0.028	-0.115	0.091	-0.012	0.027	-0.115	0.091
age: 1-6 yrs	-0.063**	0.026	0.001	0.090	-0.063**	0.026	0.001	0.090	-0.039	0.027	0.001	0.090	-0.051**	0.026	0.001	0.090
age: 7-9 yrs	-0.051*	0.027	0.034	0.091	-0.051*	0.027	0.034	0.091	-0.036	0.027	0.034	0.091	-0.044*	0.026	0.034	0.091
age: 10-15 yrs	-0.027	0.025	0.083	0.082	-0.027	0.025	0.083	0.082	-0.019	0.025	0.083	0.082	-0.019	0.024	0.083	0.082
exports >5% of sales	-0.020	0.031	-0.037	0.104	-0.020	0.031	-0.037	0.104	-0.019	0.031	-0.037	0.104	-0.019	0.030	-0.037	0.104
export status unknown or missing	0.199**	0.097	0.749**	0.321	0.199**	0.096	0.749**	0.321	0.189*	0.097	0.749**	0.321	0.200**	0.093	0.749**	0.321
foreign actors own more than 10%	0.096**	0.048	0.314**	0.154	0.097**	0.048	0.314**	0.154	0.100**	0.048	0.314**	0.154	0.104**	0.046	0.314**	0.154
state owns more than 10%	-0.074	0.098	-0.081	0.323	-0.074	0.098	-0.081	0.323	-0.055	0.098	-0.081	0.323	-0.081	0.094	-0.081	0.323
ownership status unknown or missing	0.062	0.072	0.587**	0.235	0.061	0.072	0.587**	0.235	0.051	0.072	0.587**	0.235	0.062	0.069	0.587**	0.235
log of GRP for 2010	-0.742***	0.017	-0.480***	0.146	-0.741***	0.018	-0.480***	0.146	-0.777***	0.017	-0.480***	0.146	-0.769***	0.016	-0.480***	0.146
% self-identifying as Russian	0.003***	0.001	0.014***	0.003	0.003***	0.001	0.014***	0.003	0.003***	0.001	0.014***	0.003	0.004***	0.001	0.014***	0.003
% construction in GRP value-added	0.021***	0.003	0.010	0.009	0.021***	0.003	0.010	0.009	0.020***	0.003	0.010	0.009	0.028***	0.003	0.010	0.009
% retail in GRP value-added	-0.022***	0.003	-0.021**	0.009	-0.022***	0.003	-0.021**	0.009	-0.021***	0.003	-0.021**	0.009	-0.021***	0.003	-0.021**	0.009
% natural resource extraction in GRP value-added	0.015***	0.002	0.022***	0.005	0.015***	0.002	0.022***	0.005	0.015***	0.002	0.022***	0.005	0.017***	0.002	0.022***	0.005
sector: light manufacturing	0.005	0.028	-0.020	0.091	0.005	0.028	-0.020	0.091	-0.001	0.028	-0.020	0.091	-0.002	0.027	-0.020	0.091
sector: heavy manufacturing	-0.013	0.026	0.040	0.088	-0.013	0.026	0.040	0.088	-0.015	0.026	0.040	0.088	-0.019	0.025	0.040	0.088
sector: machinery and electronics	-0.009	0.033	-0.027	0.111	-0.010	0.033	-0.027	0.111	-0.009	0.033	-0.027	0.111	-0.010	0.032	-0.027	0.111
sector: services	0.007	0.024	0.070	0.078	0.007	0.024	0.070	0.078	0.000	0.024	0.070	0.078	0.006	0.023	0.070	0.078
sector: construction	-0.018	0.028	-0.029	0.096	-0.017	0.028	-0.029	0.096	-0.022	0.028	-0.029	0.096	-0.012	0.027	-0.029	0.096
population per sq. km	0.00015***	0.00001***	0.00007***	0.00004***	0.00015***	0.00001***	0.00007***	0.00004***	0.00015***	0.00001***	0.00007***	0.00004***	0.00016***	0.00001***	0.00007***	0.00004***
Experience of Governor Change: 1 = Yes	-0.093***	0.025	0.025	0.069	-0.092***	0.025	0.025	0.069	-0.047*	0.025	0.025	0.069	-0.070***	0.025	0.025	0.069
Estimates computed with some precision (1= Yes)			0.253***	0.065			0.253***	0.065			0.253***	0.065			0.253***	0.065
Arbitrary and unreliable numbers (1=Yes)			0.490***	0.116			0.490***	0.116			0.490***	0.116			0.490***	0.116
Partially taken from the records and partially estimated: 1=Yes			0.148	0.091			0.148	0.091			0.148	0.091			0.148	0.091
Amongst the owners of the firm, are there any females? 1 = Yes			0.043	0.067			0.043	0.067			0.043	0.067			0.043	0.067
Top Manager's number of yrs of experience working in this sector			-0.001	0.003			-0.001	0.003			-0.001	0.003			-0.001	0.003
Female Top Manager? 1=Yes			0.060	0.077			0.060	0.077			0.060	0.077			0.060	0.077
Have an internationally-recognized quality certification? 1=Yes			0.129	0.085			0.129	0.085			0.129	0.085			0.129	0.085
constant			3.422*	1.771			3.422*	1.771			3.422*	1.771			3.422*	1.771
Number of observations		4,185				4,185				4,185				4,185		
chi2				28,123.950				28,257.388				28,200.646				30,607.356
chi2 (p-value)				0.000				0.000				0.000				0.000
lambda		0.265***				0.265***				0.265***				0.254***		
lambda (se)		0.067				0.066				0.067				0.064		

note: *** p<0.01, ** p<0.05, * p<0.1

Table A5.3. Heckit Regressions: #tax inspections, last year (j4)

	Specification I				Specification II				Specification III				Specification IV			
	Main Eq		Selection Eq		Main Eq		Selection Eq		Main Eq		Selection Eq		Main Eq		Selection Eq	
	coef	se	coef	se	coef	se	coef	se	coef	se	coef	se	coef	se	coef	se
Insider Governor: 1 = Yes	-0.041	0.031			-0.160	0.147			-0.054	0.035			-0.056*	0.031		
Governor's tenure (log)	-0.068***	0.018			-0.096**	0.038										
Governor: origin X tenure					0.033	0.040										
Governor's tenure: 1st quartile									0.115**	0.047						
Governor's tenure: 2nd quartile									0.065	0.046						
Governor's tenure: 3rd quartile									0.005	0.040						
Governor's tenure (months)													-0.003***	0.001		
Governor's tenure squared (months)													0.00001***	0.000003***		
size: less than 20 employees	0.066	0.047	-0.226*	0.131	0.068	0.046	-0.226*	0.131	0.067	0.048	-0.226*	0.131	0.062	0.045	-0.226*	0.131
size: 20-99 employees	0.061	0.045	-0.187	0.124	0.060	0.044	-0.187	0.124	0.061	0.045	-0.187	0.124	0.054	0.043	-0.187	0.124
age: 1-6 yrs	0.042	0.053	-0.160	0.145	0.043	0.051	-0.160	0.145	0.059	0.053	-0.160	0.145	0.048	0.050	-0.160	0.145
age: 7-9 yrs	0.042	0.055	-0.182	0.148	0.044	0.054	-0.182	0.148	0.052	0.056	-0.182	0.148	0.034	0.053	-0.182	0.148
age: 10-15 yrs	-0.072	0.045	0.163	0.124	-0.069	0.044	0.163	0.124	-0.065	0.045	0.163	0.124	-0.059	0.043	0.163	0.124
exports >5% of sales	-0.020	0.054	-0.013	0.154	-0.014	0.054	-0.013	0.154	-0.021	0.055	-0.013	0.154	-0.020	0.052	-0.013	0.154
foreign actors own more than 10%	0.034	0.087	0.006	0.240	0.028	0.085	0.006	0.240	0.015	0.089	0.006	0.240	0.018	0.083	0.006	0.240
state owns more than 10%	0.308*	0.181	-0.138	0.501	0.345*	0.183	-0.138	0.501	0.298	0.184	-0.138	0.501	0.376**	0.175	-0.138	0.501
ownership status unknown or missing	-0.064	0.147	0.106	0.412	-0.049	0.145	0.106	0.412	-0.068	0.149	0.106	0.412	-0.048	0.141	0.106	0.412
log of GRP for 2010	-0.666***	0.024	0.080	0.235	-0.660***	0.024	0.080	0.235	-0.691***	0.024	0.080	0.235	-0.689***	0.023	0.080	0.235
% self-identifying as Russian	0.000	0.001	0.003	0.004	0.000	0.001	0.003	0.004	-0.000	0.001	0.003	0.004	0.001	0.001	0.003	0.004
% construction in GRP value-added	0.017***	0.005	-0.010	0.015	0.017***	0.005	-0.010	0.015	0.016***	0.006	-0.010	0.015	0.022***	0.006	-0.010	0.015
% retail in GRP value-added	-0.007	0.005	0.014	0.014	-0.006	0.005	0.014	0.014	-0.006	0.005	0.014	0.014	-0.005	0.005	0.014	0.014
% natural resource extraction in GRP value-added	0.009***	0.003	0.019**	0.008	0.009***	0.003	0.019**	0.008	0.009***	0.003	0.019**	0.008	0.011***	0.003	0.019**	0.008
sector: light manufacturing	-0.059	0.053	0.227	0.141	-0.057	0.051	0.227	0.141	-0.064	0.053	0.227	0.141	-0.069	0.050	0.227	0.141
sector: heavy manufacturing	-0.073	0.050	0.261**	0.133	-0.073	0.049	0.261**	0.133	-0.081	0.050	0.261**	0.133	-0.074	0.047	0.261**	0.133
sector: machinery and electronics	-0.038	0.060	0.190	0.163	-0.037	0.058	0.190	0.163	-0.047	0.060	0.190	0.163	-0.039	0.057	0.190	0.163
sector: services	-0.018	0.052	-0.049	0.141	-0.020	0.051	-0.049	0.141	-0.019	0.052	-0.049	0.141	-0.025	0.049	-0.049	0.141
sector: construction	-0.028	0.056	-0.019	0.163	-0.025	0.055	-0.019	0.163	-0.029	0.057	-0.019	0.163	-0.021	0.054	-0.019	0.163
population per sq. km	0.000***	0.000	-0.000	0.000	0.000***	0.000	-0.000	0.000	0.000***	0.000	-0.000	0.000	0.000***	0.000	-0.000	0.000
Experience of Governor Change: 1 = Yes	-0.041	0.047	-0.102	0.112	-0.038	0.046	-0.102	0.112	-0.004	0.047	-0.102	0.112	-0.015	0.046	-0.102	0.112
Estimates computed with some precision (1= Yes)			0.192*	0.103			0.192*	0.103			0.192*	0.103			0.192*	0.103
Arbitrary and unreliable numbers (1=Yes)			0.596***	0.185			0.596***	0.185			0.596***	0.185			0.596***	0.185
Partially taken from the records and partially estimated: 1=Yes			-0.110	0.160			-0.110	0.160			-0.110	0.160			-0.110	0.160
Amongst the owners of the firm, are there any females? 1 = Yes			-0.120	0.111			-0.120	0.111			-0.120	0.111			-0.120	0.111
Top Manager's number of yrs of experience working in this sector			-0.003	0.005			-0.003	0.005			-0.003	0.005			-0.003	0.005
Female Top Manager? 1=Yes			-0.036	0.131			-0.036	0.131			-0.036	0.131			-0.036	0.131
Have an internationally-recognized quality certification? 1=Yes			0.042	0.129			0.042	0.129			0.042	0.129			0.042	0.129
constant			-2.830	2.814			-2.830	2.814			-2.830	2.814			-2.830	2.814
Number of observations		2,070				2,070				2,070				2,070		
chi2				6,920				7,251				6,758				7,589
chi2 (p-value)				0.000				0.000				0.000				0.000
lambda		-0.299***				-0.292***				-0.303***				-0.286***		
lambda (se)		0.094				0.092				0.097				0.091		

note: *** p<0.01, ** p<0.05, * p<0.1

Table A5.4. Heckit Regressions: #days to get operating license (j14)

	Specification I				Specification II				Specification III				Specification IV			
	Main Eq		Selection Eq		Main Eq		Selection Eq		Main Eq		Selection Eq		Main Eq		Selection Eq	
	coef	se	coef	se	coef	se	coef	se	coef	se	coef	se	coef	se	coef	se
Insider Governor: 1 = Yes	-0.098**	0.045			0.246	0.207			-0.177***	0.048			-0.103**	0.051		
Governor's tenure (log)	-0.068**	0.028			-0.002	0.048										
Governor: origin X tenure					-0.092*	0.054										
Governor's tenure: 1st quartile									0.051	0.067						
Governor's tenure: 2nd quartile									-0.073	0.060						
Governor's tenure: 3rd quartile									-0.147***	0.053						
Governor's tenure (months)													-0.002	0.002		
Governor's tenure squared (months)													0.00001	0.00001		
size: less than 20 employees	0.043	0.070	-0.522**	0.207	0.018	0.070	-0.522**	0.207	0.074	0.073	-0.522**	0.207	0.061	0.074	-0.522**	0.207
size: 20-99 employees	0.025	0.057	-0.289	0.191	0.017	0.057	-0.289	0.191	0.062	0.060	-0.289	0.191	0.037	0.061	-0.289	0.191
age: 1-6 yrs	-0.115*	0.068	0.123	0.216	-0.124*	0.067	0.123	0.216	-0.071	0.070	0.123	0.216	-0.091	0.071	0.123	0.216
age: 7-9 yrs	-0.023	0.075	-0.029	0.228	-0.033	0.074	-0.029	0.228	0.025	0.076	-0.029	0.228	-0.004	0.079	-0.029	0.228
age: 10-15 yrs	-0.051	0.061	0.181	0.192	-0.050	0.060	0.181	0.192	-0.037	0.064	0.181	0.192	-0.042	0.065	0.181	0.192
exports >5% of sales	0.089	0.069	0.045	0.251	0.061	0.070	0.045	0.251	0.059	0.078	0.045	0.251	0.104	0.073	0.045	0.251
foreign actors own more than 10%	-0.056	0.170	-0.473	0.463	-0.048	0.167	-0.473	0.463	-0.084	0.169	-0.473	0.463	-0.066	0.177	-0.473	0.463
ownership status unknown or missing	-0.169	0.153	0.153	0.586	-0.184	0.151	0.153	0.586	-0.037	0.172	0.153	0.586	-0.149	0.167	0.153	0.586
log of GRP for 2010	-0.693***	0.033	0.510	0.366	-0.716***	0.035	0.510	0.366	-0.705***	0.034	0.510	0.366	-0.705***	0.035	0.510	0.366
% self-identifying as Russian	0.001	0.003	0.014**	0.007	0.002	0.003	0.014**	0.007	0.001	0.003	0.014**	0.007	0.001	0.003	0.014**	0.007
% construction in GRP value-added	0.016**	0.008	0.025	0.022	0.018**	0.007	0.025	0.022	0.016**	0.008	0.025	0.022	0.016**	0.008	0.025	0.022
% retail in GRP value-added	-0.007	0.005	-0.001	0.020	-0.009*	0.005	-0.001	0.020	-0.008	0.006	-0.001	0.020	-0.007	0.006	-0.001	0.020
% natural resource extraction in GRP value-added	0.016***	0.004	-0.002	0.014	0.017***	0.004	-0.002	0.014	0.016***	0.004	-0.002	0.014	0.016***	0.004	-0.002	0.014
sector: light manufacturing	0.015	0.075	-0.012	0.264	0.018	0.074	-0.012	0.264	0.010	0.080	-0.012	0.264	0.014	0.080	-0.012	0.264
sector: heavy manufacturing	-0.050	0.080	-0.205	0.235	-0.036	0.079	-0.205	0.235	-0.033	0.082	-0.205	0.235	-0.029	0.083	-0.205	0.235
sector: machinery and electronics	0.024	0.087	-0.609**	0.286	0.026	0.085	-0.609**	0.286	0.072	0.092	-0.609**	0.286	0.018	0.092	-0.609**	0.286
sector: services	0.036	0.051	0.028	0.182	0.026	0.050	0.028	0.182	0.022	0.054	0.028	0.182	0.035	0.053	0.028	0.182
sector: construction	0.082	0.053	-0.260	0.202	0.063	0.053	-0.260	0.202	0.115**	0.058	-0.260	0.202	0.091	0.057	-0.260	0.202
population per sq. km	0.00012***	0.00002***	-0.00007***	0.00008***	0.00014***	0.00002***	-0.00007***	0.00008***	0.00012***	0.00002***	-0.00007***	0.00008***	0.00013***	0.00002***	-0.00007***	0.00008***
Experience of Governor Change: 1 = Yes	-0.024	0.055	0.009	0.169	-0.030	0.054	0.009	0.169	0.059	0.057	0.009	0.169	-0.002	0.059	0.009	0.169
Estimates computed with some precision (1= Yes)			0.175	0.164			0.175	0.164			0.175	0.164			0.175	0.164
Arbitrary and unreliable numbers (1=Yes)			1.074***	0.290			1.074***	0.290			1.074***	0.290			1.074***	0.290
Partially taken from the records and partially estimated: 1=Yes			0.278	0.217			0.278	0.217			0.278	0.217			0.278	0.217
Amongst the owners of the firm, are there any females? 1 = Yes			-0.104	0.171			-0.104	0.171			-0.104	0.171			-0.104	0.171
Top Manager's number of yrs of experience working in this sector			-0.014*	0.008			-0.014*	0.008			-0.014*	0.008			-0.014*	0.008
Female Top Manager? 1=Yes			0.123	0.194			0.123	0.194			0.123	0.194			0.123	0.194
Have an internationally-recognized quality certification? 1=Yes			0.193	0.188			0.193	0.188			0.193	0.188			0.193	0.188
constant			-8.812**	4.309			-8.812**	4.309			-8.812**	4.309			-8.812**	4.309
Number of observations		941				941				941				941		
chi2				11,473				11,885				9,699				10,105
chi2 (p-value)				0.000				0.000				0.000				0.000
lambda		-0.147*				-0.145*				-0.201**				-0.170**		
lambda (se)		0.081				0.079				0.084				0.086		
note: *** p<0.01, ** p<0.05, * p<0.1																

Table A5.5. Logit Regressions: was bribe expected at tax meetings (j5)								
	Specification I		**Specification II**		**Specification III**		**Specification IV**	
	coef	**se**	**coef**	**se**	**coef**	**se**	**coef**	**se**
Insider Governor: 1 = Yes	-0.729**	0.307	-1.548	1.232	-0.710**	0.315	-0.731**	0.323
Governor's tenure (log)	0.126	0.197	-0.020	0.281				
Governor: origin X tenure			0.220	0.303				
Governor's tenure: 1st quartile					-0.476	0.502		
Governor's tenure: 2nd quartile					-0.209	0.427		
Governor's tenure: 3rd quartile					-0.214	0.366		
Governor's tenure (months)							0.004	0.008
Governor's tenure squared (months)							-0.00001	0.00003
size: less than 20 employees	-0.264	0.349	-0.257	0.350	-0.253	0.349	-0.262	0.349
size: 20-99 employees	-0.092	0.320	-0.089	0.320	-0.091	0.319	-0.092	0.319
age: 1-6 yrs	-0.887**	0.403	-0.864**	0.404	-0.873**	0.411	-0.886**	0.407
age: 7-9 yrs	-0.767**	0.374	-0.754**	0.376	-0.757**	0.377	-0.767**	0.378
age: 10-15 yrs	-0.583*	0.333	-0.579*	0.336	-0.573*	0.335	-0.584*	0.332
exports >5% of sales	0.339	0.404	0.340	0.403	0.344	0.405	0.338	0.405
foreign actors own more than 10%	0.922*	0.504	0.908*	0.511	0.931*	0.505	0.921*	0.504
log of GRP for 2010	-0.761	0.586	-0.627	0.603	-0.759	0.559	-0.759	0.588
% self-identifying as Russian	-0.005	0.010	-0.005	0.010	-0.007	0.011	-0.005	0.010
% construction in GRP value-added	0.033	0.042	0.028	0.041	0.034	0.043	0.032	0.044
% retail in GRP value-added	0.034	0.041	0.040	0.043	0.037	0.042	0.033	0.041
% natural resource extraction in GRP value-added	0.036*	0.022	0.034	0.022	0.036	0.022	0.036	0.022
sector: light manufacturing	-0.139	0.366	-0.139	0.366	-0.132	0.361	-0.136	0.366
sector: heavy manufacturing	-0.119	0.342	-0.121	0.343	-0.118	0.340	-0.118	0.341
sector: machinery and electronics	-1.618**	0.735	-1.623**	0.735	-1.625**	0.737	-1.615**	0.735
sector: services	-0.572	0.427	-0.570	0.428	-0.567	0.428	-0.570	0.427
sector: construction	0.145	0.398	0.148	0.398	0.151	0.393	0.145	0.397
population per sq. km	0.0000001	0.00014	-0.00005	0.00016	0.00001	0.00014	-0.000002	0.00014
Experience of Governor Change: 1 = Yes	-0.342	0.401	-0.299	0.405	-0.307	0.398	-0.344	0.411
constant	6.630	7.123	5.382	7.215	7.418	6.726	6.953	7.063
Number of observations	1,900		1,900		1,900		1,900	
chi2		39.3		39.5		39.7		39.8
chi2 (p-value)		0.009		0.013		0.016		0.011
Pseudo R2	0.045		0.045		0.046		0.045	
note: *** p<0.01, ** p<0.05, * p<0.1								

Table A5.6. Logit Regressions: was bribe expected to get operating license (j15)								
	Specification I		Specification II		Specification III		Specification IV	
	coef	se	coef	se	coef	se	coef	se
Insider Governor: 1 = Yes	-0.557	0.350	-1.152	1.200	-0.382	0.393	-0.475	0.369
Governor's tenure (log)	0.264	0.208	0.162	0.265				
Governor: origin X tenure			0.156	0.302				
Governor's tenure: 1st quartile					-0.935*	0.524		
Governor's tenure: 2nd quartile					-0.251	0.415		
Governor's tenure: 3rd quartile					-0.003	0.356		
Governor's tenure (months)							0.012	0.009
Governor's tenure squared (months)							-0.00005	0.00004
size: less than 20 employees	-0.071	0.383	-0.063	0.382	-0.064	0.382	-0.065	0.384
size: 20-99 employees	0.068	0.333	0.074	0.333	0.073	0.333	0.070	0.333
age: 1-6 yrs	-0.347	0.373	-0.344	0.372	-0.362	0.371	-0.406	0.379
age: 7-9 yrs	0.189	0.396	0.197	0.397	0.179	0.384	0.141	0.392
age: 10-15 yrs	-0.096	0.316	-0.095	0.317	-0.056	0.317	-0.120	0.316
exports >5% of sales	1.012***	0.327	1.013***	0.326	1.048***	0.327	0.995***	0.328
export status unknown or missing	1.339	1.152	1.328	1.165	1.423	1.164	1.257	1.172
foreign actors own more than 10%	-0.877	1.061	-0.885	1.063	-0.883	1.056	-0.855	1.061
state owns more than 10%	0.641	0.763	0.662	0.764	0.668	0.770	0.606	0.762
log of GRP for 2010	0.832	0.664	0.933	0.698	1.034	0.707	0.864	0.670
% self-identifying as Russian	-0.007	0.010	-0.007	0.010	-0.014	0.012	-0.008	0.011
% construction in GRP value-added	-0.025	0.051	-0.027	0.050	-0.033	0.051	-0.037	0.053
% retail in GRP value-added	-0.032	0.038	-0.029	0.037	-0.023	0.040	-0.036	0.037
% natural resource extraction in GRP value-added	-0.013	0.022	-0.014	0.022	-0.015	0.023	-0.016	0.023
sector: light manufacturing	-0.005	0.437	-0.005	0.437	-0.040	0.434	-0.013	0.436
sector: heavy manufacturing	-0.115	0.377	-0.117	0.376	-0.113	0.378	-0.118	0.378
sector: machinery and electronics	-0.614	0.390	-0.612	0.388	-0.645*	0.385	-0.608	0.391
sector: services	-1.341***	0.467	-1.344***	0.469	-1.340***	0.469	-1.344***	0.463
sector: construction	-0.360	0.323	-0.359	0.323	-0.361	0.321	-0.378	0.321
population per sq. km	-0.00003	0.00014	-0.00007	0.00014	-0.00005	0.00014	-0.00004	0.00014
Experience of Governor Change: 1 = Yes	0.377	0.447	0.417	0.468	0.366	0.411	0.223	0.436
constant	-12.020	8.270	-12.965	8.535	-12.740	8.324	-11.449	8.090
Number of observations	893		893		893		893	
chi2		31.1		30.7		34.4		33.9
chi2 (p-value)		0.120		0.161		0.100		0.086
Pseudo R2	0.064		0.065		0.069		0.065	
note: *** p<0.01, ** p<0.05, * p<0.1								

Table A5.7. Logit Regressions: was bribe expected for construction permit (g4)								
	Specification I		Specification II		Specification III		Specification IV	
	coef	se	coef	se	coef	se	coef	se
Insider Governor: 1 = Yes	-0.394	0.365	-2.050	1.433	-0.351	0.369	-0.241	0.365
Governor's tenure (log)	0.129	0.200	-0.204	0.359				
Governor: origin X tenure			0.447	0.391				
Governor's tenure: 1st quartile					0.302	0.557		
Governor's tenure: 2nd quartile					0.230	0.509		
Governor's tenure: 3rd quartile					1.571***	0.420		
Governor's tenure (months)							0.016*	0.010
Governor's tenure squared (months)							-0.00008*	0.00004*
size: less than 20 employees	0.097	0.394	0.110	0.388	-0.026	0.420	0.041	0.401
size: 20-99 employees	0.377	0.327	0.391	0.322	0.424	0.343	0.369	0.331
age: 1-6 yrs	-0.372	0.411	-0.381	0.413	-0.540	0.425	-0.480	0.416
age: 7-9 yrs	-0.157	0.423	-0.157	0.427	-0.191	0.433	-0.222	0.416
age: 10-15 yrs	-0.205	0.339	-0.196	0.343	-0.305	0.352	-0.273	0.334
exports >5% of sales	1.555***	0.401	1.576***	0.401	1.362***	0.413	1.563***	0.407
foreign actors own more than 10%	-0.728	0.939	-0.700	0.957	-0.930	0.843	-0.801	0.922
log of GRP for 2010	1.767***	0.682	2.089***	0.736	2.465***	0.788	1.771**	0.688
% self-identifying as Russian	-0.015	0.011	-0.016	0.010	-0.020	0.012	-0.019*	0.011
%construction in GRP value-added	-0.102*	0.058	-0.113**	0.057	-0.114**	0.049	-0.117**	0.055
%retail in GRP value-added	-0.059	0.041	-0.044	0.044	-0.049	0.044	-0.058	0.040
%natural resource extraction in GRP value-added	-0.071***	0.027	-0.075***	0.027	-0.083***	0.031	-0.072**	0.028
sector: light manufacturing	0.059	0.433	0.015	0.438	0.034	0.436	0.001	0.426
sector: heavy manufacturing	-0.912**	0.424	-0.954**	0.426	-0.799*	0.424	-0.971**	0.432
sector: machinery and electronics	-0.726	0.574	-0.772	0.574	-0.618	0.576	-0.705	0.586
sector: services	-0.245	0.438	-0.273	0.445	-0.305	0.433	-0.245	0.430
sector: construction	-0.114	0.341	-0.148	0.344	-0.034	0.346	-0.091	0.344
population per sq. km	-0.00054	0.00021	-0.00062	0.00021	-0.00083	0.00038	-0.00058	0.00026
Experience of Governor Change: 1 = Yes	-0.504	0.413	-0.498	0.414	-0.823*	0.441	-0.795*	0.409
constant	-19.321**	7.894	-22.165***	8.269	-27.293***	9.081	-18.623**	7.807
Number of observations	385		385		385		385	
chi2		35.9		38.4		48.7		37.1
chi2 (p-value)		0.023		0.017		0.001		0.023
Pseudo R2	0.084		0.087		0.137		0.094	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A5.8. Logit Regressions: Largest Obstacle - Corruption (m1adum6)								
	Specification I		Specification II		Specification III		Specification IV	
	coef	se	coef	se	coef	se	coef	se
Insider Governor: 1 = Yes	-0.292*	0.162	-0.854	0.680	-0.349**	0.167	-0.345**	0.172
Governor's tenure (log)	-0.192**	0.095	-0.298**	0.150				
Governor: origin X tenure			0.154	0.177				
Governor's tenure: 1st quartile					0.092	0.239		
Governor's tenure: 2nd quartile					-0.013	0.225		
Governor's tenure: 3rd quartile					-0.316	0.206		
Governor's tenure (months)							-0.011**	0.004
Governor's tenure squared (months)							0.00004**	0.00002**
size: less than 20 employees	-0.017	0.203	-0.015	0.203	-0.006	0.204	-0.024	0.203
size: 20-99 employees	0.227	0.206	0.231	0.206	0.228	0.206	0.223	0.206
age: 1-6 yrs	-0.033	0.188	-0.022	0.189	0.043	0.190	-0.010	0.190
age: 7-9 yrs	-0.100	0.211	-0.094	0.211	-0.049	0.211	-0.088	0.210
age: 10-15 yrs	0.013	0.177	0.018	0.178	0.036	0.178	0.023	0.178
exports >5% of sales	0.328	0.207	0.330	0.206	0.329	0.207	0.335	0.207
foreign actors own more than 10%	0.061	0.358	0.052	0.359	0.053	0.359	0.053	0.360
ownership status unknown or missing	-0.243	0.729	-0.232	0.729	-0.253	0.728	-0.244	0.731
log of GRP for 2010	-0.186	0.358	-0.083	0.376	-0.152	0.336	-0.207	0.362
% self-identifying as Russian	0.005	0.005	0.005	0.005	0.004	0.005	0.006	0.006
% construction in GRP value-added	0.027	0.025	0.023	0.025	0.021	0.024	0.038	0.026
% retail in GRP value-added	-0.047*	0.024	-0.044*	0.024	-0.045**	0.023	-0.046*	0.024
% natural resource extraction in GRP value-added	0.003	0.014	0.001	0.014	0.000	0.013	0.005	0.014
sector: light manufacturing	-0.084	0.208	-0.090	0.209	-0.075	0.209	-0.093	0.210
sector: heavy manufacturing	0.117	0.184	0.112	0.184	0.127	0.184	0.117	0.184
sector: machinery and electronics	0.530**	0.231	0.527**	0.231	0.524**	0.232	0.522**	0.231
sector: services	-0.427**	0.209	-0.426**	0.209	-0.423**	0.208	-0.425**	0.209
sector: construction	0.427**	0.211	0.424**	0.211	0.439**	0.212	0.432**	0.211
population per sq. km	0.00009	0.00009	0.00006	0.00010	0.00008	0.00008	0.00010	0.00009
Experience of Governor Change: 1 = Yes	0.004	0.184	0.029	0.186	0.185	0.197	0.084	0.193
constant	0.592	4.330	-0.336	4.469	-0.528	3.937	0.233	4.298
Number of observations	4,135		4,135		4,135		4,135	
chi2		37.2		37.9		39.3		39.5
chi2 (p-value)		0.022		0.026		0.026		0.017
Pseudo R2	0.020		0.020		0.020		0.021	
note: *** p<0.01, ** p<0.05, * p<0.1								

Table A5.9. Ordered Logit Regressions, customs and trade regulations - obstacle (d30b)								
	Specification I		**Specification II**		**Specification III**		**Specification IV**	
	coef	**se**	**coef**	**se**	**coef**	**se**	**coef**	**se**
Insider Governor: 1 = Yes	-0.141	0.123	0.512	0.517	-0.226*	0.131	-0.068	0.130
Governor's tenure (log)	-0.315***	0.081	-0.186	0.133				
Governor: origin X tenure			-0.178	0.133				
Governor's tenure: 1st quartile					0.700***	0.194		
Governor's tenure: 2nd quartile					0.142	0.173		
Governor's tenure: 3rd quartile					0.268*	0.145		
Governor's tenure (months)							-0.003	0.004
Governor's tenure squared (months)							-0.00001	0.00002
size: less than 20 employees	-0.352***	0.132	-0.353***	0.132	-0.384***	0.132	-0.358***	0.131
size: 20-99 employees	-0.043	0.122	-0.047	0.122	-0.064	0.122	-0.036	0.121
age: 1-6 yrs	-0.096	0.122	-0.107	0.123	-0.003	0.123	-0.104	0.124
age: 7-9 yrs	0.051	0.126	0.046	0.126	0.121	0.126	0.058	0.126
age: 10-15 yrs	-0.091	0.114	-0.095	0.114	-0.054	0.114	-0.088	0.114
exports >5% of sales	1.110***	0.116	1.106***	0.117	1.085***	0.117	1.107***	0.117
export status unknown or missing	-0.283	0.700	-0.279	0.698	-0.287	0.710	-0.304	0.701
foreign actors own more than 10%	0.645***	0.186	0.651***	0.186	0.671***	0.187	0.666***	0.187
state owns more than 10%	-0.352	0.405	-0.365	0.405	-0.329	0.408	-0.377	0.404
ownership status unknown or missing	-0.390	0.383	-0.414	0.386	-0.405	0.367	-0.373	0.380
log of GRP for 2010	0.774***	0.273	0.678**	0.264	0.733***	0.272	0.840***	0.276
% self-identifying as Russian	0.005	0.004	0.005	0.004	0.007	0.005	0.003	0.004
% construction in GRP value-added	0.055***	0.017	0.060***	0.017	0.049***	0.017	0.046**	0.018
% retail in GRP value-added	0.029	0.018	0.025	0.017	0.027	0.017	0.034*	0.018
% natural resource extraction in GRP value-added	-0.002	0.010	-0.000	0.010	-0.002	0.010	-0.002	0.010
sector: light manufacturing	-0.155	0.131	-0.144	0.131	-0.157	0.132	-0.151	0.133
sector: heavy manufacturing	-0.014	0.123	-0.010	0.123	-0.009	0.123	-0.022	0.124
sector: machinery and electronics	0.160	0.152	0.167	0.152	0.145	0.153	0.153	0.154
sector: services	-0.136	0.140	-0.135	0.140	-0.142	0.142	-0.145	0.141
sector: construction	-0.628***	0.163	-0.626***	0.163	-0.647***	0.165	-0.635***	0.164
population per sq. km	-0.00012*	0.00007*	-0.00008*	0.00007*	-0.00012*	0.00007*	-0.00012*	0.00007*
Experience of Governor Change: 1 = Yes	-0.166	0.137	-0.189	0.138	0.010	0.135	-0.174	0.138
/cut1	10.279***	3.392	9.526***	3.282	11.538***	3.267	11.906***	3.359
/cut2	10.706***	3.393	9.954***	3.283	11.965***	3.269	12.333***	3.360
/cut3	11.489***	3.389	10.738***	3.280	12.749***	3.265	13.115***	3.357
/cut4	12.645***	3.395	11.893***	3.287	13.904***	3.271	14.271***	3.364
Number of observations	3,389		3,389		3,389		3,389	
chi2		316		317		327		319
chi2 (p-value)		0.000		0.000		0.000		0.000
Pseudo R2	0.045		0.045		0.045		0.045	
note: *** p<0.01, ** p<0.05, * p<0.1								

Table A5.10. Ordered Logit Regressions, Access to land - obstacle to current operations (g30a)								
	Specification I		Specification II		Specification III		Specification IV	
	coef	se	coef	se	coef	se	coef	se
Insider Governor: 1 = Yes	-0.400***	0.100	1.450***	0.493	-0.458***	0.104	-0.334***	0.108
Governor's tenure (log)	-0.178**	0.070	0.178	0.125				
Governor: origin X tenure			-0.508***	0.129				
Governor's tenure: 1st quartile					0.569***	0.171		
Governor's tenure: 2nd quartile					0.074	0.163		
Governor's tenure: 3rd quartile					0.394***	0.134		
Governor's tenure (months)							0.002	0.003
Governor's tenure squared (months)							-0.00002	0.00001
size: less than 20 employees	-0.278**	0.118	-0.283**	0.119	-0.296**	0.117	-0.277**	0.118
size: 20-99 employees	-0.031	0.114	-0.041	0.115	-0.042	0.114	-0.028	0.115
age: 1-6 yrs	-0.059	0.105	-0.092	0.106	-0.013	0.105	-0.077	0.107
age: 7-9 yrs	0.016	0.107	0.003	0.108	0.052	0.108	0.012	0.107
age: 10-15 yrs	-0.064	0.096	-0.077	0.096	-0.045	0.097	-0.072	0.096
exports >5% of sales	0.302**	0.126	0.300**	0.126	0.280**	0.126	0.302**	0.126
export status unknown or missing	-1.787	1.095	-1.786	1.099	-1.882*	1.114	-1.821*	1.098
foreign actors own more than 10%	-0.185	0.224	-0.178	0.222	-0.189	0.224	-0.172	0.223
state owns more than 10%	-0.337	0.389	-0.334	0.399	-0.294	0.389	-0.359	0.385
ownership status unknown or missing	-0.413	0.351	-0.460	0.349	-0.393	0.358	-0.391	0.354
log of GRP for 2010	0.590**	0.238	0.250	0.229	0.584**	0.237	0.630***	0.240
% self-identifying as Russian	0.005	0.003	0.005	0.003	0.008**	0.003	0.002	0.003
% construction in GRP value-added	0.095***	0.015	0.110***	0.015	0.093***	0.014	0.085***	0.017
% retail in GRP value-added	-0.015	0.014	-0.029**	0.013	-0.022	0.014	-0.013	0.013
% natural resource extraction in GRP value-added	0.003	0.008	0.009	0.008	0.002	0.008	0.002	0.009
sector: light manufacturing	-0.098	0.112	-0.089	0.111	-0.104	0.109	-0.095	0.113
sector: heavy manufacturing	-0.055	0.109	-0.048	0.107	-0.049	0.109	-0.060	0.109
sector: machinery and electronics	-0.380**	0.150	-0.373**	0.149	-0.384**	0.151	-0.384**	0.151
sector: services	-0.324***	0.116	-0.327***	0.116	-0.327***	0.115	-0.334***	0.116
sector: construction	0.091	0.123	0.107	0.122	0.068	0.123	0.086	0.123
population per sq. km	-0.00004*	0.00006*	0.00008*	0.00006*	-0.00005*	0.00006*	-0.00004*	0.00006*
Experience of Governor Change: 1 = Yes	0.118	0.119	0.037	0.121	0.189	0.118	0.079	0.121
/cut1	7.832***	2.954	4.790*	2.787	8.919***	2.821	8.730***	2.870
/cut2	8.169***	2.952	5.128*	2.785	9.257***	2.819	9.067***	2.868
/cut3	8.743***	2.948	5.705**	2.783	9.835***	2.815	9.641***	2.865
/cut4	9.740***	2.941	6.707**	2.774	10.836***	2.808	10.640***	2.857
Number of observations	3,688		3,688		3,688		3,688	
chi2		179		203		189		186
chi2 (p-value)		0.000		0.000		0.000		0.000
Pseudo R2	0.023		0.026		0.026		0.024	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A5.11. Ordered Logit Regressions, access to finance - an obstacle (k30a)								
	Specification I		Specification II		Specification III		Specification IV	
	coef	se	coef	se	coef	se	coef	se
Insider Governor: 1 = Yes	-0.206**	0.086	0.159	0.393	-0.310***	0.094	-0.194**	0.093
Governor's tenure (log)	-0.110*	0.057	-0.041	0.097				
Governor: origin X tenure			-0.098	0.101				
Governor's tenure: 1st quartile					0.262*	0.140		
Governor's tenure: 2nd quartile					-0.326***	0.120		
Governor's tenure: 3rd quartile					0.027	0.103		
Governor's tenure (months)							-0.002	0.003
Governor's tenure squared (months)							0.000003	0.00001
size: less than 20 employees	0.128	0.106	0.127	0.106	0.118	0.106	0.126	0.106
size: 20-99 employees	0.109	0.104	0.106	0.103	0.096	0.103	0.108	0.104
age: 1-6 yrs	-0.144	0.095	-0.150	0.095	-0.029	0.095	-0.137	0.095
age: 7-9 yrs	-0.079	0.098	-0.082	0.098	0.006	0.098	-0.072	0.098
age: 10-15 yrs	-0.069	0.084	-0.072	0.084	-0.026	0.084	-0.065	0.085
exports >5% of sales	0.237**	0.104	0.236**	0.104	0.227**	0.104	0.238**	0.104
export status unknown or missing	-0.140	0.589	-0.139	0.593	-0.134	0.587	-0.141	0.589
foreign actors own more than 10%	-0.173	0.196	-0.167	0.195	-0.183	0.198	-0.167	0.196
state owns more than 10%	-0.147	0.425	-0.149	0.421	-0.115	0.421	-0.149	0.426
ownership status unknown or missing	-0.069	0.331	-0.078	0.331	-0.064	0.351	-0.061	0.332
log of GRP for 2010	0.837***	0.207	0.776***	0.202	0.687***	0.206	0.851***	0.209
% self-identifying as Russian	0.002	0.003	0.002	0.003	0.006**	0.003	0.001	0.003
% construction in GRP value-added	0.010	0.014	0.013	0.013	0.009	0.013	0.009	0.015
% retail in GRP value-added	-0.029***	0.011	-0.032***	0.011	-0.036***	0.011	-0.028**	0.011
% natural resource extraction in GRP value-added	-0.020**	0.008	-0.018**	0.008	-0.019**	0.008	-0.020**	0.008
sector: light manufacturing	0.235**	0.103	0.240**	0.103	0.228**	0.101	0.236**	0.103
sector: heavy manufacturing	0.164	0.100	0.167*	0.100	0.169*	0.099	0.162	0.100
sector: machinery and electronics	0.103	0.131	0.107	0.132	0.102	0.133	0.100	0.131
sector: services	-0.109	0.094	-0.110	0.094	-0.114	0.094	-0.111	0.094
sector: construction	0.309***	0.111	0.311***	0.111	0.288***	0.111	0.308***	0.111
population per sq. km	-0.00007*	0.00005*	-0.00005*	0.00005*	-0.00007*	0.00005*	-0.00007*	0.00005*
Experience of Governor Change: 1 = Yes	-0.266**	0.107	-0.281***	0.108	-0.070	0.103	-0.248**	0.107
/cut1	9.063***	2.462	8.522***	2.389	8.007***	2.389	9.537***	2.437
/cut2	9.699***	2.465	9.158***	2.392	8.647***	2.391	10.173***	2.440
/cut3	10.619***	2.464	10.078***	2.392	9.573***	2.390	11.093***	2.439
/cut4	11.950***	2.467	11.409***	2.395	10.908***	2.392	12.423***	2.442
Number of observations	4,048		4,048		4,048		4,048	
chi2		85		85		107		83
chi2 (p-value)		0.000		0.000		0.000		0.000
Pseudo R2	0.009		0.009		0.011		0.008	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A5.12. Ordered Logit Regressions, Practices of informal competitors - obstacle to current operations (e30)								
	Specification I		Specification II		Specification III		Specification IV	
	coef	se	coef	se	coef	se	coef	se
Insider Governor: 1 = Yes	-0.406***	0.102	-0.990**	0.474	-0.427***	0.107	-0.422***	0.108
Governor's tenure (log)	-0.023	0.067	-0.133	0.113				
Governor: origin X tenure			0.158	0.120				
Governor's tenure: 1st quartile					0.345**	0.160		
Governor's tenure: 2nd quartile					0.017	0.139		
Governor's tenure: 3rd quartile					0.383***	0.116		
Governor's tenure (months)							-0.002	0.003
Governor's tenure squared (months)							0.00001	0.00001
size: less than 20 employees	0.154	0.117	0.152	0.118	0.140	0.117	0.153	0.117
size: 20-99 employees	0.178	0.116	0.178	0.116	0.173	0.116	0.177	0.116
age: 1-6 yrs	-0.180	0.110	-0.168	0.109	-0.183*	0.106	-0.180*	0.108
age: 7-9 yrs	-0.136	0.115	-0.129	0.115	-0.131	0.114	-0.138	0.114
age: 10-15 yrs	-0.098	0.095	-0.093	0.095	-0.089	0.094	-0.098	0.095
exports >5% of sales	-0.022	0.122	-0.020	0.122	-0.033	0.121	-0.020	0.122
export status unknown or missing	-0.774	0.565	-0.785	0.560	-0.816	0.577	-0.772	0.563
foreign actors own more than 10%	-0.204	0.216	-0.212	0.217	-0.210	0.216	-0.208	0.216
state owns more than 10%	0.119	0.366	0.127	0.368	0.161	0.365	0.125	0.367
ownership status unknown or missing	-0.106	0.374	-0.096	0.371	-0.098	0.385	-0.109	0.373
log of GRP for 2010	0.464**	0.224	0.570**	0.231	0.430*	0.227	0.456**	0.224
% self-identifying as Russian	-0.001	0.003	-0.001	0.003	0.002	0.003	-0.000	0.003
% construction in GRP value-added	0.003	0.016	-0.001	0.015	0.005	0.015	0.006	0.017
% retail in GRP value-added	-0.037***	0.012	-0.033***	0.013	-0.041***	0.012	-0.037***	0.012
% natural resource extraction in GRP value-added	-0.004	0.009	-0.006	0.009	-0.002	0.009	-0.003	0.009
sector: light manufacturing	0.115	0.121	0.108	0.121	0.109	0.119	0.111	0.121
sector: heavy manufacturing	-0.005	0.118	-0.009	0.118	-0.003	0.118	-0.005	0.118
sector: machinery and electronics	-0.180	0.152	-0.182	0.153	-0.175	0.152	-0.181	0.152
sector: services	0.040	0.109	0.040	0.109	0.047	0.109	0.042	0.109
sector: construction	0.223*	0.121	0.219*	0.121	0.211*	0.118	0.224*	0.122
population per sq. km	0.00001*	0.00005*	-0.00002*	0.00006*	0.00001*	0.00005*	0.00001*	0.00005*
Experience of Governor Change: 1 = Yes	-0.007	0.120	0.020	0.120	-0.049	0.114	0.001	0.120
/cut1	5.123*	2.679	6.098**	2.710	5.185*	2.655	5.100*	2.639
/cut2	5.684**	2.680	6.658**	2.712	5.749**	2.656	5.660**	2.640
/cut3	6.607**	2.674	7.582***	2.707	6.677**	2.648	6.584**	2.634
/cut4	7.840***	2.674	8.815***	2.708	7.913***	2.648	7.817***	2.634
Number of observations	3,616		3,616		3,616		3,616	
chi2		70		71		93		69
chi2 (p-value)		0.000		0.000		0.000		0.000
Pseudo R2	0.009		0.009		0.012		0.009	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A5.13. Ordered Logit Regressions, crime, theft, disorder - an obstacle (i30)								
	Specification I		Specification II		Specification III		Specification IV	
	coef	se	coef	se	coef	se	coef	se
Insider Governor: 1 = Yes	-0.479***	0.107	-1.566***	0.436	-0.597***	0.114	-0.496***	0.111
Governor's tenure (log)	-0.300***	0.064	-0.507***	0.105				
Governor: origin X tenure			0.295**	0.117				
Governor's tenure: 1st quartile					0.424***	0.147		
Governor's tenure: 2nd quartile					-0.096	0.132		
Governor's tenure: 3rd quartile					-0.205*	0.123		
Governor's tenure (months)							-0.010***	0.003
Governor's tenure squared (months)							0.00003	0.00001
size: less than 20 employees	-0.313***	0.112	-0.312***	0.112	-0.313***	0.112	-0.318***	0.112
size: 20-99 employees	-0.091	0.111	-0.085	0.111	-0.098	0.111	-0.093	0.111
age: 1-6 yrs	-0.047	0.107	-0.027	0.107	0.089	0.105	-0.032	0.108
age: 7-9 yrs	-0.050	0.104	-0.040	0.104	0.039	0.104	-0.041	0.104
age: 10-15 yrs	-0.018	0.095	-0.010	0.095	0.022	0.095	-0.011	0.095
exports >5% of sales	0.141	0.122	0.143	0.122	0.134	0.121	0.148	0.122
export status unknown or missing	-0.653	0.660	-0.650	0.663	-0.618	0.673	-0.652	0.657
foreign actors own more than 10%	-0.156	0.200	-0.170	0.203	-0.165	0.202	-0.155	0.201
state owns more than 10%	-0.658	0.402	-0.643	0.403	-0.641	0.402	-0.652	0.404
ownership status unknown or missing	0.448	0.291	0.478*	0.289	0.441	0.277	0.462	0.291
log of GRP for 2010	0.558**	0.234	0.757***	0.244	0.483**	0.225	0.563**	0.234
% self-identifying as Russian	0.003	0.003	0.003	0.003	0.005	0.003	0.003	0.003
% construction in GRP value-added	0.061***	0.016	0.053***	0.015	0.056***	0.015	0.067***	0.016
% retail in GRP value-added	-0.036***	0.013	-0.029**	0.013	-0.040***	0.012	-0.033**	0.013
% natural resource extraction in GRP value-added	-0.004	0.009	-0.008	0.009	-0.006	0.008	-0.003	0.009
sector: light manufacturing	-0.193*	0.115	-0.205*	0.114	-0.185	0.114	-0.198*	0.115
sector: heavy manufacturing	-0.309***	0.115	-0.317***	0.115	-0.296***	0.113	-0.309***	0.115
sector: machinery and electronics	-0.500***	0.135	-0.509***	0.135	-0.504***	0.135	-0.507***	0.135
sector: services	0.071	0.110	0.074	0.109	0.071	0.109	0.071	0.109
sector: construction	0.026	0.113	0.024	0.113	0.028	0.114	0.028	0.113
population per sq. km	-0.00006*	0.00005*	-0.00012*	0.00006*	-0.00006*	0.00005*	-0.00006*	0.00005*
Experience of Governor Change: 1 = Yes	-0.028	0.104	0.016	0.103	0.250**	0.103	0.021	0.105
/cut1	5.651**	2.849	7.482**	2.918	6.215**	2.642	6.563**	2.795
/cut2	6.482**	2.854	8.314***	2.923	7.046***	2.646	7.392***	2.800
/cut3	7.284**	2.853	9.119***	2.922	7.850***	2.645	8.195***	2.799
/cut4	8.490***	2.842	10.326***	2.913	9.057***	2.634	9.400***	2.788
Number of observations	4,065		4,065		4,065		4,065	
chi2		134		145		140		137
chi2 (p-value)		0.000		0.000		0.000		0.000
Pseudo R2	0.020		0.021		0.021		0.020	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A5.14. Ordered Logit Regressions, tax rates - an obstacle (j30a)								
	Specification I		Specification II		Specification III		Specification IV	
	coef	se	coef	se	coef	se	coef	se
Insider Governor: 1 = Yes	0.038	0.080	0.987***	0.349	-0.018	0.085	0.091	0.084
Governor's tenure (log)	0.110**	0.050	0.289***	0.079				
Governor: origin X tenure			-0.256***	0.092				
Governor's tenure: 1st quartile					0.022	0.121		
Governor's tenure: 2nd quartile					-0.387***	0.126		
Governor's tenure: 3rd quartile					0.114	0.097		
Governor's tenure (months)							0.009***	0.002
Governor's tenure squared (months)							-0.00003	0.00001
size: less than 20 employees	-0.053	0.094	-0.056	0.094	-0.062	0.094	-0.047	0.094
size: 20-99 employees	0.093	0.093	0.087	0.093	0.087	0.093	0.098	0.093
age: 1-6 yrs	-0.122	0.092	-0.137	0.092	-0.101	0.092	-0.120	0.093
age: 7-9 yrs	-0.008	0.094	-0.016	0.094	0.015	0.095	-0.000	0.094
age: 10-15 yrs	0.030	0.088	0.022	0.087	0.043	0.088	0.030	0.088
exports >5% of sales	-0.068	0.113	-0.072	0.113	-0.089	0.113	-0.076	0.113
export status unknown or missing	-1.329***	0.515	-1.313**	0.523	-1.310**	0.530	-1.337**	0.534
foreign actors own more than 10%	-0.648***	0.155	-0.639***	0.155	-0.663***	0.155	-0.641***	0.154
state owns more than 10%	-0.077	0.262	-0.090	0.264	-0.055	0.261	-0.095	0.266
ownership status unknown or missing	-0.172	0.333	-0.193	0.339	-0.169	0.336	-0.163	0.338
log of GRP for 2010	0.305	0.187	0.138	0.203	0.146	0.187	0.340*	0.188
% self-identifying as Russian	-0.002	0.002	-0.002	0.003	0.003	0.003	-0.004	0.003
% construction in GRP value-added	0.009	0.012	0.015	0.012	0.014	0.011	-0.002	0.013
% retail in GRP value-added	0.004	0.012	-0.002	0.012	-0.004	0.012	0.003	0.011
% natural resource extraction in GRP value-added	-0.009	0.007	-0.006	0.007	-0.006	0.007	-0.010	0.007
sector: light manufacturing	0.288***	0.104	0.301***	0.105	0.288***	0.103	0.298***	0.104
sector: heavy manufacturing	0.153	0.097	0.163*	0.097	0.155	0.097	0.154	0.096
sector: machinery and electronics	0.149	0.117	0.158	0.118	0.154	0.117	0.154	0.117
sector: services	0.103	0.087	0.099	0.087	0.099	0.086	0.094	0.087
sector: construction	0.129	0.109	0.132	0.109	0.109	0.106	0.122	0.108
population per sq. km	-0.00002*	0.00004*	0.00004*	0.00004*	-0.00001*	0.00004*	-0.00002*	0.00004*
Experience of Governor Change: 1 = Yes	0.033	0.102	-0.005	0.103	0.045	0.102	0.018	0.105
/cut1	2.245	2.245	0.726	2.384	0.106	2.183	2.317	2.212
/cut2	2.827	2.243	1.308	2.382	0.690	2.181	2.900	2.210
/cut3	3.891*	2.244	2.373	2.383	1.760	2.182	3.965*	2.210
/cut4	5.294**	2.249	3.778	2.388	3.170	2.187	5.372**	2.215
Number of observations	4,136		4,136		4,136		4,136	
chi2		78		90		98		92
chi2 (p-value)		0.000		0.000		0.000		0.000
Pseudo R2	0.006		0.007		0.009		0.008	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A5.15. Ordered Logit Regressions, tax admininstration - an obstacle (j30b)								
	Specification I		Specification II		Specification III		Specification IV	
	coef	se	coef	se	coef	se	coef	se
Insider Governor: 1 = Yes	-0.302***	0.104	-1.156***	0.434	-0.475***	0.106	-0.287***	0.109
Governor's tenure (log)	-0.170***	0.061	-0.333***	0.109				
Governor: origin X tenure			0.231**	0.110				
Governor's tenure: 1st quartile					0.337**	0.140		
Governor's tenure: 2nd quartile					-0.458***	0.127		
Governor's tenure: 3rd quartile					-0.274**	0.109		
Governor's tenure (months)							-0.003	0.003
Governor's tenure squared (months)							0.000004	0.00001
size: less than 20 employees	-0.235**	0.108	-0.232**	0.108	-0.240**	0.107	-0.240**	0.107
size: 20-99 employees	-0.036	0.106	-0.029	0.107	-0.052	0.107	-0.039	0.106
age: 1-6 yrs	0.042	0.097	0.056	0.097	0.197**	0.094	0.066	0.097
age: 7-9 yrs	0.033	0.095	0.039	0.095	0.136	0.096	0.052	0.095
age: 10-15 yrs	0.060	0.088	0.067	0.088	0.117	0.087	0.069	0.089
exports >5% of sales	0.248**	0.109	0.249**	0.109	0.232**	0.109	0.249**	0.109
export status unknown or missing	0.443	0.445	0.437	0.440	0.529	0.464	0.441	0.450
foreign actors own more than 10%	-0.100	0.175	-0.109	0.177	-0.114	0.180	-0.091	0.175
state owns more than 10%	0.133	0.349	0.141	0.351	0.173	0.370	0.130	0.350
ownership status unknown or missing	-0.094	0.395	-0.073	0.389	-0.080	0.394	-0.080	0.395
log of GRP for 2010	-0.346	0.224	-0.205	0.217	-0.579***	0.210	-0.316	0.226
% self-identifying as Russian	0.009***	0.003	0.010***	0.003	0.015***	0.003	0.008**	0.003
% construction in GRP value-added	0.015	0.015	0.009	0.014	0.015	0.014	0.012	0.016
% retail in GRP value-added	-0.022*	0.012	-0.017	0.013	-0.033***	0.012	-0.019	0.012
% natural resource extraction in GRP value-added	0.013	0.008	0.010	0.008	0.012*	0.007	0.012	0.008
sector: light manufacturing	-0.107	0.110	-0.115	0.110	-0.103	0.110	-0.107	0.111
sector: heavy manufacturing	-0.089	0.105	-0.097	0.104	-0.076	0.105	-0.091	0.105
sector: machinery and electronics	-0.022	0.131	-0.030	0.131	-0.022	0.132	-0.031	0.131
sector: services	-0.248**	0.100	-0.246**	0.099	-0.252**	0.100	-0.251**	0.100
sector: construction	0.024	0.117	0.021	0.116	0.020	0.116	0.021	0.117
population per sq. km	0.00008*	0.00005*	0.00004*	0.00005*	0.00010*	0.00004*	0.00008*	0.00005*
Experience of Governor Change: 1 = Yes	-0.085	0.103	-0.051	0.102	0.184*	0.101	-0.025	0.103
/cut1	-4.604*	2.708	-3.367	2.618	-6.422***	2.473	-3.747	2.671
/cut2	-3.854	2.710	-2.616	2.621	-5.666**	2.476	-2.998	2.673
/cut3	-2.766	2.711	-1.527	2.620	-4.567*	2.477	-1.912	2.675
/cut4	-1.592	2.701	-0.351	2.612	-3.383	2.470	-0.738	2.666
Number of observations	4,140		4,140		4,140		4,140	
chi2		48		50		88		46
chi2 (p-value)		0.003		0.002		0.000		0.006
Pseudo R2	0.007		0.007		0.012		0.006	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A5.16. Ordered Logit Regressions, business licensing and permits - an obstacle (j30c)								
	Specification I		Specification II		Specification III		Specification IV	
	coef	se	coef	se	coef	se	coef	se
Insider Governor: 1 = Yes	-0.323***	0.107	-1.309***	0.459	-0.458***	0.111	-0.337***	0.116
Governor's tenure (log)	-0.322***	0.067	-0.514***	0.114				
Governor: origin X tenure			0.269**	0.119				
Governor's tenure: 1st quartile					0.862***	0.157		
Governor's tenure: 2nd quartile					-0.0002	0.147		
Governor's tenure: 3rd quartile					0.277**	0.114		
Governor's tenure (months)							-0.011***	0.003
Governor's tenure squared (months)							0.00003	0.00001
size: less than 20 employees	-0.225*	0.123	-0.222*	0.123	-0.254**	0.123	-0.235*	0.123
size: 20-99 employees	0.102	0.120	0.108	0.120	0.080	0.121	0.097	0.120
age: 1-6 yrs	-0.464***	0.115	-0.446***	0.115	-0.353***	0.115	-0.443***	0.115
age: 7-9 yrs	-0.292**	0.121	-0.285**	0.122	-0.212*	0.121	-0.276**	0.121
age: 10-15 yrs	-0.256**	0.106	-0.250**	0.106	-0.214**	0.106	-0.246**	0.106
exports >5% of sales	0.256**	0.129	0.260**	0.129	0.224*	0.131	0.264**	0.129
export status unknown or missing	-0.247	0.813	-0.258	0.815	-0.307	0.795	-0.241	0.808
foreign actors own more than 10%	-0.017	0.209	-0.030	0.210	-0.017	0.211	-0.017	0.209
state owns more than 10%	-0.377	0.402	-0.374	0.407	-0.359	0.402	-0.369	0.404
ownership status unknown or missing	-0.106	0.343	-0.074	0.347	-0.139	0.337	-0.090	0.342
log of GRP for 2010	0.539**	0.245	0.715***	0.239	0.472**	0.238	0.543**	0.248
% self-identifying as Russian	0.008**	0.004	0.009**	0.004	0.014***	0.004	0.008**	0.004
% construction in GRP value-added	0.073***	0.015	0.065***	0.015	0.070***	0.014	0.078***	0.017
% retail in GRP value-added	-0.068***	0.013	-0.061***	0.013	-0.077***	0.013	-0.064***	0.013
% natural resource extraction in GRP value-added	-0.005	0.009	-0.008	0.009	-0.005	0.009	-0.004	0.009
sector: light manufacturing	-0.214*	0.125	-0.223*	0.125	-0.206*	0.122	-0.221*	0.125
sector: heavy manufacturing	0.168	0.117	0.163	0.116	0.180	0.117	0.166	0.117
sector: machinery and electronics	0.475***	0.135	0.472***	0.134	0.486***	0.137	0.462***	0.135
sector: services	0.139	0.116	0.144	0.116	0.140	0.118	0.139	0.116
sector: construction	0.611***	0.138	0.615***	0.138	0.588***	0.135	0.612***	0.137
population per sq. km	0.00003*	0.00005*	-0.00003*	0.00005*	0.00003*	0.00005*	0.00004*	0.00005*
Experience of Governor Change: 1 = Yes	-0.204*	0.118	-0.162	0.117	-0.021	0.116	-0.136	0.120
/cut1	5.858**	2.953	7.435***	2.852	6.983**	2.808	6.817**	2.929
/cut2	6.320**	2.955	7.897***	2.853	7.448***	2.809	7.277**	2.931
/cut3	6.980**	2.954	8.559***	2.853	8.115***	2.809	7.938***	2.930
/cut4	8.095***	2.954	9.674***	2.856	9.232***	2.810	9.052***	2.931
Number of observations	3,773		3,773		3,773		3,773	
chi2		231		239		238		226
chi2 (p-value)		0.000		0.000		0.000		0.000
Pseudo R2	0.032		0.033		0.036		0.031	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A5.17. Ordered Logit Regressions, corruption - an obstacle (j30f)								
	Specification I		Specification II		Specification III		Specification IV	
	coef	se	coef	se	coef	se	coef	se
Insider Governor: 1 = Yes	-0.205**	0.090	0.301	0.400	-0.305***	0.095	-0.184*	0.094
Governor's tenure (log)	-0.080	0.057	0.016	0.100				
Governor: origin X tenure			-0.137	0.103				
Governor's tenure: 1st quartile					0.246*	0.139		
Governor's tenure: 2nd quartile					-0.330**	0.130		
Governor's tenure: 3rd quartile					0.032	0.112		
Governor's tenure (months)							0.000	0.003
Governor's tenure squared (months)							-0.000004	0.00001
size: less than 20 employees	-0.072	0.103	-0.076	0.103	-0.086	0.102	-0.075	0.103
size: 20-99 employees	0.079	0.102	0.075	0.102	0.059	0.102	0.078	0.102
age: 1-6 yrs	-0.275***	0.095	-0.284***	0.095	-0.181*	0.095	-0.268***	0.096
age: 7-9 yrs	-0.136	0.094	-0.141	0.094	-0.075	0.093	-0.129	0.094
age: 10-15 yrs	-0.131	0.088	-0.136	0.088	-0.098	0.087	-0.129	0.088
exports >5% of sales	0.307***	0.108	0.304***	0.108	0.291***	0.108	0.307***	0.108
export status unknown or missing	-0.815*	0.480	-0.800*	0.485	-0.794	0.496	-0.815*	0.484
foreign actors own more than 10%	-0.249	0.195	-0.241	0.193	-0.273	0.194	-0.242	0.194
state owns more than 10%	-0.920***	0.297	-0.922***	0.297	-0.895***	0.306	-0.927***	0.299
ownership status unknown or missing	-0.247	0.409	-0.256	0.409	-0.249	0.409	-0.239	0.409
log of GRP for 2010	0.532**	0.211	0.445**	0.212	0.371*	0.209	0.552***	0.212
% self-identifying as Russian	0.001	0.003	0.001	0.003	0.006**	0.003	0.000	0.003
% construction in GRP value-added	0.026*	0.015	0.029**	0.015	0.026*	0.014	0.021	0.015
% retail in GRP value-added	0.006	0.011	0.002	0.011	-0.001	0.011	0.007	0.011
% natural resource extraction in GRP value-added	-0.014*	0.008	-0.012	0.008	-0.012	0.008	-0.014*	0.008
sector: light manufacturing	0.003	0.110	0.009	0.110	0.003	0.108	0.004	0.110
sector: heavy manufacturing	0.086	0.102	0.092	0.103	0.096	0.102	0.085	0.102
sector: machinery and electronics	0.090	0.114	0.095	0.114	0.089	0.112	0.087	0.114
sector: services	-0.043	0.092	-0.043	0.092	-0.045	0.092	-0.047	0.092
sector: construction	0.350***	0.104	0.353***	0.104	0.332***	0.103	0.348***	0.104
population per sq. km	-0.00003*	0.00004*	0.00000*	0.00004*	-0.00002*	0.00004*	-0.00003*	0.00004*
Experience of Governor Change: 1 = Yes	-0.218**	0.106	-0.241**	0.107	-0.059	0.109	-0.201*	0.109
/cut1	5.943**	2.482	5.159**	2.481	4.646*	2.394	6.403***	2.454
/cut2	6.473***	2.484	5.689**	2.483	5.179**	2.395	6.933***	2.456
/cut3	7.203***	2.486	6.420***	2.485	5.915**	2.397	7.663***	2.458
/cut4	8.405***	2.484	7.622***	2.483	7.122***	2.396	8.864***	2.456
Number of observations	3,936		3,936		3,936		3,936	
chi2		101		104		123		100
chi2 (p-value)		0.000		0.000		0.000		0.000
Pseudo R2	0.011		0.011		0.014		0.011	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A5.18. Ordered Logit Regressions, courts - an obstacle (h30)								
	Specification I		Specification II		Specification III		Specification IV	
	coef	se	coef	se	coef	se	coef	se
Insider Governor: 1 = Yes	-0.405***	0.132	-1.935***	0.537	-0.535***	0.145	-0.379***	0.145
Governor's tenure (log)	-0.150*	0.080	-0.447***	0.135				
Governor: origin X tenure			0.419***	0.139				
Governor's tenure: 1st quartile					0.268	0.186		
Governor's tenure: 2nd quartile					-0.468***	0.159		
Governor's tenure: 3rd quartile					-0.068	0.140		
Governor's tenure (months)							-0.001	0.004
Governor's tenure squared (months)							-0.000003	0.00002
size: less than 20 employees	-0.733***	0.126	-0.732***	0.126	-0.751***	0.126	-0.736***	0.126
size: 20-99 employees	-0.291***	0.112	-0.284**	0.112	-0.312***	0.112	-0.290***	0.111
age: 1-6 yrs	-0.381***	0.119	-0.348***	0.119	-0.225*	0.120	-0.374***	0.119
age: 7-9 yrs	-0.224*	0.121	-0.210*	0.121	-0.117	0.120	-0.214*	0.120
age: 10-15 yrs	-0.062	0.107	-0.049	0.108	0.004	0.107	-0.058	0.107
exports >5% of sales	0.252*	0.134	0.255*	0.134	0.228*	0.133	0.252*	0.134
export status unknown or missing	-0.637	0.815	-0.643	0.828	-0.634	0.834	-0.650	0.817
foreign actors own more than 10%	-0.313	0.242	-0.331	0.242	-0.339	0.246	-0.304	0.242
state owns more than 10%	0.154	0.389	0.174	0.399	0.174	0.392	0.146	0.390
ownership status unknown or missing	-0.310	0.396	-0.264	0.389	-0.286	0.396	-0.301	0.396
log of GRP for 2010	-0.488*	0.294	-0.241	0.281	-0.665**	0.294	-0.455	0.297
% self-identifying as Russian	0.006*	0.004	0.007*	0.004	0.011***	0.004	0.005	0.004
% construction in GRP value-added	0.085***	0.021	0.074***	0.019	0.080***	0.019	0.080***	0.022
% retail in GRP value-added	-0.024*	0.014	-0.015	0.015	-0.032**	0.014	-0.022	0.014
% natural resource extraction in GRP value-added	0.024**	0.011	0.019*	0.011	0.024**	0.010	0.023**	0.012
sector: light manufacturing	0.086	0.142	0.077	0.142	0.099	0.139	0.088	0.142
sector: heavy manufacturing	-0.105	0.139	-0.122	0.140	-0.089	0.138	-0.105	0.139
sector: machinery and electronics	-0.083	0.163	-0.100	0.163	-0.092	0.164	-0.088	0.163
sector: services	0.070	0.130	0.073	0.130	0.067	0.129	0.065	0.130
sector: construction	0.037	0.146	0.033	0.145	0.014	0.144	0.035	0.145
population per sq. km	0.00010*	0.00006*	0.00001*	0.00006*	0.00011*	0.00006*	0.00009*	0.00006*
Experience of Governor Change: 1 = Yes	-0.037	0.135	0.039	0.137	0.244*	0.131	-0.019	0.130
/cut1	-5.388	3.531	-3.229	3.388	-6.620*	3.395	-4.593	3.443
/cut2	-4.761	3.535	-2.599	3.391	-5.989*	3.399	-3.966	3.449
/cut3	-3.952	3.544	-1.787	3.398	-5.174	3.406	-3.158	3.458
/cut4	-2.564	3.532	-0.397	3.388	-3.781	3.393	-1.771	3.446
Number of observations	3,923		3,923		3,923		3,923	
chi2		146		158		171		148
chi2 (p-value)		0.000		0.000		0.000		0.000
Pseudo R2	0.023		0.025		0.027		0.023	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A5.19. Ordered Logit Regressions, frequency of bribes, 1-6 (ECAq39)								
	Specification I		Specification II		Specification III		Specification IV	
	coef	se	coef	se	coef	se	coef	se
Insider Governor: 1 = Yes	-0.942***	0.094	-0.967**	0.418	-1.058***	0.092	-0.956***	0.098
Governor's tenure (log)	-0.206***	0.057	-0.211**	0.098				
Governor: origin X tenure			0.007	0.111				
Governor's tenure: 1st quartile					0.736***	0.133		
Governor's tenure: 2nd quartile					0.049	0.135		
Governor's tenure: 3rd quartile					0.172	0.115		
Governor's tenure (months)							-0.006**	0.003
Governor's tenure squared (months)							0.00002	0.00001
size: less than 20 employees	-0.201*	0.109	-0.201*	0.109	-0.216**	0.109	-0.206*	0.109
size: 20-99 employees	0.036	0.107	0.036	0.107	0.022	0.107	0.033	0.107
age: 1-6 yrs	-0.056	0.102	-0.055	0.103	-0.007	0.102	-0.027	0.104
age: 7-9 yrs	0.009	0.098	0.009	0.098	0.044	0.097	0.029	0.098
age: 10-15 yrs	-0.031	0.090	-0.031	0.090	-0.016	0.091	-0.019	0.090
exports >5% of sales	0.304***	0.109	0.304***	0.109	0.282***	0.108	0.312***	0.109
export status unknown or missing	0.159	0.471	0.159	0.471	0.142	0.464	0.161	0.468
foreign actors own more than 10%	0.173	0.212	0.172	0.211	0.167	0.212	0.175	0.212
state owns more than 10%	-0.517	0.360	-0.517	0.360	-0.491	0.351	-0.505	0.363
ownership status unknown or missing	-0.154	0.449	-0.154	0.449	-0.140	0.451	-0.143	0.452
log of GRP for 2010	0.431**	0.194	0.436**	0.212	0.302	0.184	0.443**	0.194
% self-identifying as Russian	0.007***	0.003	0.007***	0.003	0.013***	0.003	0.007**	0.003
% construction in GRP value-added	0.069***	0.013	0.069***	0.014	0.072***	0.013	0.071***	0.014
% retail in GRP value-added	-0.018	0.012	-0.017	0.012	-0.027**	0.012	-0.015	0.011
% natural resource extraction in GRP value-added	-0.001	0.008	-0.001	0.008	0.000	0.007	-0.000	0.008
sector: light manufacturing	-0.098	0.109	-0.098	0.109	-0.094	0.108	-0.101	0.109
sector: heavy manufacturing	-0.023	0.113	-0.024	0.113	-0.012	0.112	-0.023	0.113
sector: machinery and electronics	0.022	0.130	0.022	0.130	0.033	0.129	0.009	0.129
sector: services	-0.168	0.103	-0.168	0.103	-0.168*	0.102	-0.169*	0.102
sector: construction	0.342***	0.124	0.342***	0.124	0.326***	0.122	0.343***	0.124
population per sq. km	-0.00005*	0.00005*	-0.00006*	0.00005*	-0.00005*	0.00005*	-0.00005*	0.00004*
Experience of Governor Change: 1 = Yes	-0.078	0.107	-0.077	0.106	-0.026	0.106	0.003	0.109
/cut1	4.428*	2.398	4.469*	2.548	4.237*	2.258	5.197**	2.346
/cut2	5.134**	2.398	5.175**	2.548	4.947**	2.258	5.902**	2.347
/cut3	6.234***	2.397	6.275**	2.547	6.058***	2.254	7.002***	2.346
/cut4	7.469***	2.394	7.510***	2.546	7.301***	2.253	8.236***	2.343
/cut5	8.151***	2.399	8.192***	2.550	7.984***	2.257	8.918***	2.348
Number of observations	3,812		3,812		3,812		3,812	
chi2		204		204		244		201
chi2 (p-value)		0.000		0.000		0.000		0.000
Pseudo R2	0.025		0.025		0.028		0.024	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A5.20. Ordered Logit Regressions, frequency of bribes to customs/imports (ECAq41a)								
	Specification I		Specification II		Specification III		Specification IV	
	coef	se	coef	se	coef	se	coef	se
Insider Governor: 1 = Yes	-0.737***	0.131	-1.501**	0.732	-0.887***	0.128	-0.746***	0.140
Governor's tenure (log)	-0.297***	0.085	-0.446***	0.166				
Governor: origin X tenure			0.211	0.202				
Governor's tenure: 1st quartile					0.823***	0.209		
Governor's tenure: 2nd quartile					0.071	0.208		
Governor's tenure: 3rd quartile					-0.009	0.215		
Governor's tenure (months)							-0.007*	0.004
Governor's tenure squared (months)							0.00002	0.00002
size: less than 20 employees	-0.115	0.147	-0.113	0.147	-0.125	0.147	-0.125	0.146
size: 20-99 employees	-0.074	0.143	-0.072	0.143	-0.088	0.142	-0.077	0.143
age: 1-6 yrs	-0.002	0.145	0.010	0.145	0.081	0.141	0.056	0.146
age: 7-9 yrs	0.010	0.135	0.018	0.135	0.057	0.133	0.057	0.135
age: 10-15 yrs	-0.029	0.123	-0.022	0.124	-0.007	0.122	-0.004	0.123
exports >5% of sales	0.886***	0.129	0.891***	0.129	0.868***	0.129	0.889***	0.129
export status unknown or missing	-0.198	0.779	-0.209	0.780	-0.130	0.759	-0.163	0.770
foreign actors own more than 10%	0.298	0.260	0.292	0.260	0.279	0.258	0.311	0.259
state owns more than 10%	-0.513	0.536	-0.511	0.532	-0.471	0.523	-0.505	0.537
ownership status unknown or missing	-1.191*	0.715	-1.167	0.712	-1.160	0.725	-1.174	0.714
log of GRP for 2010	-0.454	0.281	-0.332	0.310	-0.608**	0.271	-0.419	0.281
% self-identifying as Russian	0.029***	0.005	0.030***	0.005	0.035***	0.005	0.028***	0.005
% construction in GRP value-added	0.071***	0.020	0.064***	0.021	0.073***	0.020	0.069***	0.022
% retail in GRP value-added	-0.036*	0.019	-0.031	0.020	-0.047**	0.019	-0.032*	0.019
% natural resource extraction in GRP value-added	0.001	0.013	-0.001	0.013	0.002	0.012	0.001	0.013
sector: light manufacturing	-0.048	0.157	-0.053	0.158	-0.027	0.156	-0.048	0.157
sector: heavy manufacturing	0.027	0.152	0.026	0.152	0.056	0.153	0.024	0.153
sector: machinery and electronics	0.085	0.184	0.076	0.186	0.096	0.182	0.067	0.184
sector: services	-0.393**	0.157	-0.393**	0.158	-0.390**	0.156	-0.396**	0.157
sector: construction	0.194	0.174	0.186	0.174	0.187	0.177	0.194	0.174
population per sq. km	0.00004*	0.00007*	-0.00001*	0.00008*	0.00005*	0.00007*	0.00003*	0.00007*
Experience of Governor Change: 1 = Yes	-0.027	0.146	-0.002	0.147	0.083	0.148	0.119	0.147
/cut1	-3.496	3.412	-2.445	3.643	-3.665	3.238	-2.147	3.299
/cut2	-2.920	3.408	-1.869	3.639	-3.086	3.233	-1.573	3.296
/cut3	-1.977	3.402	-0.924	3.635	-2.132	3.223	-0.632	3.290
/cut4	-0.710	3.390	0.344	3.631	-0.855	3.214	0.632	3.278
/cut5	-0.005	3.377	1.048	3.620	-0.150	3.203	1.337	3.265
Number of observations	3,472		3,472		3,472		3,472	
chi2		184		191		231		178
chi2 (p-value)		0.000		0.000		0.000		0.000
Pseudo R2	0.042		0.043		0.046		0.040	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A5.21. Ordered Logit Regressions, frequency of bribes to courts (ECAq41b)								
	Specification I		Specification II		Specification III		Specification IV	
	coef	se	coef	se	coef	se	coef	se
Insider Governor: 1 = Yes	-0.939***	0.122	-2.762***	0.653	-1.078***	0.118	-0.967***	0.131
Governor's tenure (log)	-0.313***	0.077	-0.669***	0.154				
Governor: origin X tenure			0.504***	0.184				
Governor's tenure: 1st quartile					0.974***	0.198		
Governor's tenure: 2nd quartile					0.243	0.191		
Governor's tenure: 3rd quartile					0.133	0.201		
Governor's tenure (months)							-0.010***	0.004
Governor's tenure squared (months)							0.00003	0.00002
size: less than 20 employees	-0.199	0.137	-0.195	0.137	-0.205	0.138	-0.205	0.137
size: 20-99 employees	-0.144	0.137	-0.138	0.137	-0.148	0.137	-0.147	0.137
age: 1-6 yrs	-0.059	0.129	-0.023	0.129	-0.015	0.130	-0.007	0.131
age: 7-9 yrs	0.086	0.127	0.105	0.127	0.106	0.126	0.122	0.127
age: 10-15 yrs	0.011	0.119	0.031	0.121	0.022	0.120	0.032	0.119
exports >5% of sales	0.431***	0.144	0.440***	0.143	0.410***	0.145	0.436***	0.144
export status unknown or missing	0.168	0.782	0.154	0.781	0.186	0.760	0.205	0.774
foreign actors own more than 10%	-0.292	0.271	-0.317	0.271	-0.336	0.277	-0.277	0.270
state owns more than 10%	-0.310	0.485	-0.280	0.473	-0.273	0.478	-0.298	0.483
ownership status unknown or missing	-0.343	0.553	-0.289	0.554	-0.326	0.571	-0.323	0.555
log of GRP for 2010	-0.678***	0.231	-0.404	0.257	-0.797***	0.228	-0.654***	0.232
% self-identifying as Russian	0.017***	0.004	0.019***	0.003	0.023***	0.004	0.016***	0.004
% construction in GRP value-added	0.078***	0.019	0.064***	0.020	0.081***	0.019	0.081***	0.020
% retail in GRP value-added	-0.026	0.017	-0.013	0.017	-0.037**	0.017	-0.022	0.016
% natural resource extraction in GRP value-added	0.017	0.011	0.013	0.011	0.018*	0.010	0.018	0.011
sector: light manufacturing	0.079	0.138	0.070	0.138	0.093	0.136	0.075	0.138
sector: heavy manufacturing	0.037	0.145	0.029	0.146	0.064	0.146	0.037	0.146
sector: machinery and electronics	0.065	0.179	0.047	0.179	0.087	0.177	0.046	0.178
sector: services	-0.140	0.144	-0.138	0.144	-0.138	0.143	-0.143	0.144
sector: construction	0.185	0.158	0.171	0.157	0.176	0.156	0.185	0.158
population per sq. km	-0.00002*	0.00006*	-0.00012*	0.00007*	-0.00001*	0.00006*	-0.00002*	0.00006*
Experience of Governor Change: 1 = Yes	-0.207	0.130	-0.135	0.132	-0.168	0.137	-0.061	0.136
/cut1	-7.585***	2.853	-5.162*	3.039	-7.153***	2.767	-6.314**	2.780
/cut2	-6.895**	2.848	-4.468	3.035	-6.458**	2.762	-5.625**	2.776
/cut3	-5.884**	2.848	-3.453	3.038	-5.435**	2.756	-4.617*	2.775
/cut4	-4.313	2.829	-1.877	3.023	-3.852	2.742	-3.047	2.758
/cut5	-3.428	2.846	-0.993	3.038	-2.968	2.756	-2.162	2.775
Number of observations	3,552		3,552		3,552		3,552	
chi2		128		154		162		123
chi2 (p-value)		0.000		0.000		0.000		0.000
Pseudo R2	0.031		0.034		0.036		0.030	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A5.22. Ordered Logit Regressions, frequency of bribes to tax collection (ECAq41c)								
	Specification I		Specification II		Specification III		Specification IV	
	coef	se	coef	se	coef	se	coef	se
Insider Governor: 1 = Yes	-0.931***	0.113	-2.680***	0.492	-1.075***	0.110	-0.970***	0.122
Governor's tenure (log)	-0.152**	0.069	-0.467***	0.110				
Governor: origin X tenure			0.474***	0.128				
Governor's tenure: 1st quartile					0.580***	0.169		
Governor's tenure: 2nd quartile					-0.158	0.163		
Governor's tenure: 3rd quartile					-0.098	0.159		
Governor's tenure (months)							-0.005*	0.003
Governor's tenure squared (months)							0.00002	0.00001
size: less than 20 employees	-0.144	0.124	-0.134	0.125	-0.147	0.124	-0.148	0.124
size: 20-99 employees	-0.037	0.123	-0.023	0.124	-0.047	0.123	-0.041	0.123
age: 1-6 yrs	0.032	0.119	0.063	0.119	0.096	0.118	0.094	0.119
age: 7-9 yrs	0.023	0.119	0.036	0.119	0.052	0.118	0.064	0.119
age: 10-15 yrs	0.035	0.104	0.047	0.105	0.055	0.104	0.058	0.104
exports >5% of sales	0.266**	0.128	0.273**	0.127	0.244*	0.127	0.269**	0.128
export status unknown or missing	0.280	0.679	0.266	0.684	0.353	0.664	0.320	0.671
foreign actors own more than 10%	-0.259	0.267	-0.282	0.268	-0.302	0.275	-0.255	0.266
state owns more than 10%	0.098	0.343	0.111	0.338	0.142	0.329	0.115	0.343
ownership status unknown or missing	-0.594	0.585	-0.546	0.589	-0.568	0.583	-0.580	0.586
log of GRP for 2010	-0.603***	0.231	-0.297	0.244	-0.804***	0.222	-0.598***	0.231
% self-identifying as Russian	0.014***	0.003	0.016***	0.003	0.021***	0.003	0.014***	0.003
% construction in GRP value-added	0.063***	0.018	0.048***	0.018	0.066***	0.017	0.064***	0.019
% retail in GRP value-added	0.003	0.014	0.015	0.015	-0.010	0.015	0.006	0.014
% natural resource extraction in GRP value-added	0.008	0.010	0.002	0.010	0.009	0.009	0.008	0.010
sector: light manufacturing	-0.166	0.132	-0.171	0.132	-0.151	0.130	-0.166	0.132
sector: heavy manufacturing	-0.082	0.122	-0.087	0.122	-0.057	0.123	-0.080	0.122
sector: machinery and electronics	-0.165	0.156	-0.175	0.156	-0.141	0.155	-0.177	0.156
sector: services	-0.195	0.125	-0.187	0.125	-0.193	0.125	-0.194	0.125
sector: construction	0.102	0.137	0.095	0.136	0.095	0.136	0.105	0.137
population per sq. km	0.00001*	0.00005*	-0.00009*	0.00005*	0.00003*	0.00005*	0.00001*	0.00004*
Experience of Governor Change: 1 = Yes	-0.047	0.119	0.027	0.118	0.029	0.123	0.102	0.119
/cut1	-6.229**	2.740	-3.333	2.837	-7.624***	2.626	-5.586**	2.693
/cut2	-5.502**	2.739	-2.603	2.837	-6.893***	2.626	-4.859*	2.693
/cut3	-4.323	2.739	-1.417	2.835	-5.697**	2.619	-3.680	2.692
/cut4	-2.857	2.703	0.054	2.810	-4.215	2.589	-2.215	2.656
/cut5	-1.987	2.704	0.923	2.808	-3.345	2.588	-1.345	2.657
Number of observations	3,716		3,716		3,716		3,716	
chi2		140		152		181		142
chi2 (p-value)		0.000		0.000		0.000		0.000
Pseudo R2	0.028		0.030		0.032		0.027	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A5.23. Ordered Logit Regressions, bribes to parliamentarians - direct impact (ECAq44a)								
	Specification I		Specification II		Specification III		Specification IV	
	coef	se	coef	se	coef	se	coef	se
Insider Governor: 1 = Yes	-1.049***	0.148	-3.678***	0.765	-1.096***	0.137	-1.093***	0.155
Governor's tenure (log)	-0.193**	0.093	-0.705***	0.176				
Governor: origin X tenure			0.729***	0.214				
Governor's tenure: 1st quartile					1.109***	0.245		
Governor's tenure: 2nd quartile					0.496**	0.241		
Governor's tenure: 3rd quartile					0.386*	0.220		
Governor's tenure (months)							-0.007	0.004
Governor's tenure squared (months)							0.00003	0.00002
size: less than 20 employees	-0.063	0.155	-0.060	0.155	-0.071	0.155	-0.070	0.156
size: 20-99 employees	-0.138	0.150	-0.128	0.150	-0.127	0.149	-0.144	0.151
age: 1-6 yrs	-0.038	0.144	0.012	0.145	-0.115	0.146	0.026	0.148
age: 7-9 yrs	-0.022	0.144	0.009	0.145	-0.085	0.143	0.022	0.145
age: 10-15 yrs	0.031	0.128	0.036	0.129	-0.008	0.129	0.057	0.129
exports >5% of sales	0.027	0.164	0.030	0.165	0.003	0.162	0.032	0.165
export status unknown or missing	0.040	0.702	-0.081	0.667	-0.052	0.708	0.059	0.678
foreign actors own more than 10%	-0.552*	0.314	-0.559*	0.318	-0.591*	0.310	-0.547*	0.317
state owns more than 10%	0.506	0.461	0.556	0.447	0.535	0.451	0.528	0.468
ownership status unknown or missing	-0.330	0.747	-0.351	0.760	-0.327	0.708	-0.330	0.755
log of GRP for 2010	-0.216	0.274	0.152	0.307	-0.249	0.270	-0.205	0.274
% self-identifying as Russian	0.028***	0.005	0.028***	0.005	0.034***	0.006	0.027***	0.006
% construction in GRP value-added	0.136***	0.021	0.113***	0.022	0.142***	0.020	0.139***	0.022
% retail in GRP value-added	0.005	0.024	0.020	0.025	-0.013	0.024	0.009	0.023
% natural resource extraction in GRP value-added	0.016	0.013	0.008	0.012	0.015	0.013	0.016	0.013
sector: light manufacturing	-0.066	0.170	-0.090	0.171	-0.074	0.167	-0.065	0.171
sector: heavy manufacturing	0.077	0.160	0.066	0.159	0.082	0.157	0.080	0.160
sector: machinery and electronics	0.234	0.198	0.214	0.200	0.265	0.195	0.221	0.199
sector: services	-0.153	0.159	-0.153	0.157	-0.143	0.159	-0.152	0.158
sector: construction	0.378**	0.180	0.360**	0.178	0.384**	0.178	0.379**	0.180
population per sq. km	-0.00011	0.00008	-0.00026	0.00009	-0.00009	0.00008	-0.00011	0.00008
Experience of Governor Change: 1 = Yes	-0.120	0.138	-0.019	0.139	-0.317**	0.143	0.025	0.139
/cut1	0.669	3.470	3.612	3.711	1.610	3.304	1.486	3.346
/cut2	1.243	3.467	4.193	3.708	2.193	3.299	2.059	3.344
/cut3	2.413	3.437	5.373	3.681	3.380	3.276	3.229	3.316
/cut4	4.442	3.439	7.402**	3.682	5.412*	3.278	5.257	3.318
Number of observations	3,210		3,210		3,210		3,210	
chi2		192		222		253		191
chi2 (p-value)		0.000		0.000		0.000		0.000
Pseudo R2	0.050		0.055		0.057		0.049	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A5.24. Ordered Logit Regressions, bribes to gov officials - direct impact (ECAq44b)								
	Specification I		Specification II		Specification III		Specification IV	
	coef	se	coef	se	coef	se	coef	se
Insider Governor: 1 = Yes	-0.984***	0.142	-3.374***	0.722	-1.051***	0.134	-1.026***	0.151
Governor's tenure (log)	-0.245***	0.088	-0.718***	0.171				
Governor: origin X tenure			0.665***	0.205				
Governor's tenure: 1st quartile					1.089***	0.223		
Governor's tenure: 2nd quartile					0.521**	0.218		
Governor's tenure: 3rd quartile					0.255	0.204		
Governor's tenure (months)							-0.008**	0.004
Governor's tenure squared (months)							0.00003	0.00002
size: less than 20 employees	-0.131	0.151	-0.125	0.151	-0.135	0.151	-0.137	0.152
size: 20-99 employees	-0.081	0.144	-0.065	0.145	-0.073	0.144	-0.085	0.145
age: 1-6 yrs	0.014	0.141	0.057	0.142	-0.045	0.142	0.076	0.145
age: 7-9 yrs	0.014	0.141	0.043	0.141	-0.039	0.141	0.057	0.142
age: 10-15 yrs	0.102	0.125	0.110	0.125	0.066	0.126	0.127	0.125
exports >5% of sales	0.093	0.157	0.095	0.158	0.073	0.157	0.099	0.158
export status unknown or missing	0.138	0.778	0.081	0.751	0.091	0.787	0.159	0.755
foreign actors own more than 10%	-0.607**	0.300	-0.605**	0.306	-0.631**	0.303	-0.602**	0.301
state owns more than 10%	0.499	0.478	0.537	0.467	0.516	0.470	0.521	0.485
ownership status unknown or missing	0.373	0.491	0.383	0.505	0.366	0.486	0.379	0.497
log of GRP for 2010	-0.123	0.262	0.223	0.299	-0.130	0.257	-0.112	0.262
% self-identifying as Russian	0.027***	0.005	0.028***	0.004	0.032***	0.005	0.027***	0.005
% construction in GRP value-added	0.126***	0.019	0.105***	0.020	0.131***	0.018	0.130***	0.021
% retail in GRP value-added	0.004	0.023	0.019	0.025	-0.009	0.023	0.008	0.023
% natural resource extraction in GRP value-added	0.014	0.013	0.007	0.012	0.013	0.013	0.014	0.013
sector: light manufacturing	-0.112	0.160	-0.139	0.160	-0.114	0.157	-0.113	0.161
sector: heavy manufacturing	0.006	0.154	-0.008	0.154	0.017	0.152	0.007	0.155
sector: machinery and electronics	0.182	0.193	0.163	0.195	0.205	0.192	0.166	0.193
sector: services	-0.174	0.150	-0.175	0.149	-0.161	0.150	-0.176	0.150
sector: construction	0.398**	0.178	0.381**	0.176	0.407**	0.176	0.399**	0.178
population per sq. km	-0.00014	0.00007	-0.00029	0.00009	-0.00014	0.00008	-0.00015	0.00007
Experience of Governor Change: 1 = Yes	-0.159	0.142	-0.069	0.143	-0.325**	0.141	-0.009	0.142
/cut1	1.430	3.342	4.228	3.645	2.865	3.168	2.388	3.216
/cut2	1.989	3.337	4.794	3.640	3.433	3.163	2.946	3.213
/cut3	3.068	3.325	5.882	3.633	4.522	3.157	4.025	3.203
/cut4	5.323	3.315	8.137**	3.622	6.779**	3.148	6.280**	3.193
Number of observations	3,183		3,183		3,183		3,183	
chi2		211		241		273		203
chi2 (p-value)		0.000		0.000		0.000		0.000
Pseudo R2	0.047		0.051		0.053		0.046	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A5.25. Ordered Logit Regressions, bribes to regional/local officials - direct impact (ECAq44c)								
	Specification I		Specification II		Specification III		Specification IV	
	coef	se	coef	se	coef	se	coef	se
Insider Governor: 1 = Yes	-0.857***	0.130	-2.585***	0.651	-0.905***	0.126	-0.882***	0.137
Governor's tenure (log)	-0.237***	0.075	-0.562***	0.141				
Governor: origin X tenure			0.475***	0.182				
Governor's tenure: 1st quartile					1.013***	0.194		
Governor's tenure: 2nd quartile					0.586***	0.204		
Governor's tenure: 3rd quartile					0.365**	0.175		
Governor's tenure (months)							-0.008**	0.004
Governor's tenure squared (months)							0.00003	0.00002
size: less than 20 employees	0.000	0.148	0.004	0.148	-0.004	0.148	-0.004	0.149
size: 20-99 employees	0.066	0.144	0.074	0.144	0.077	0.144	0.063	0.145
age: 1-6 yrs	-0.156	0.132	-0.126	0.132	-0.231*	0.132	-0.120	0.135
age: 7-9 yrs	-0.210	0.130	-0.190	0.131	-0.268**	0.130	-0.184	0.131
age: 10-15 yrs	-0.095	0.118	-0.086	0.118	-0.127	0.119	-0.080	0.118
exports >5% of sales	-0.029	0.152	-0.025	0.151	-0.041	0.150	-0.022	0.152
export status unknown or missing	-0.533	0.869	-0.563	0.855	-0.596	0.899	-0.519	0.853
foreign actors own more than 10%	-0.451	0.279	-0.460	0.280	-0.473*	0.276	-0.445	0.279
state owns more than 10%	-0.011	0.530	0.014	0.527	0.011	0.522	0.002	0.534
ownership status unknown or missing	0.684	0.680	0.691	0.700	0.659	0.668	0.696	0.688
log of GRP for 2010	-0.203	0.229	0.117	0.267	-0.130	0.232	-0.196	0.231
% self-identifying as Russian	0.023***	0.005	0.023***	0.004	0.027***	0.005	0.023***	0.005
% construction in GRP value-added	0.113***	0.019	0.097***	0.019	0.115***	0.018	0.117***	0.021
% retail in GRP value-added	0.003	0.018	0.018	0.020	-0.005	0.019	0.007	0.018
% natural resource extraction in GRP value-added	0.014	0.012	0.008	0.012	0.012	0.012	0.015	0.012
sector: light manufacturing	-0.203	0.152	-0.218	0.152	-0.212	0.150	-0.204	0.152
sector: heavy manufacturing	0.054	0.144	0.045	0.143	0.058	0.142	0.055	0.144
sector: machinery and electronics	0.190	0.182	0.177	0.183	0.204	0.181	0.180	0.182
sector: services	-0.213	0.146	-0.213	0.145	-0.203	0.146	-0.214	0.146
sector: construction	0.368**	0.165	0.360**	0.163	0.372**	0.162	0.371**	0.165
population per sq. km	-0.00007	0.00006	-0.00019	0.00008	-0.00008	0.00006	-0.00007	0.00006
Experience of Governor Change: 1 = Yes	-0.207	0.126	-0.147	0.126	-0.383***	0.128	-0.114	0.127
/cut1	-0.115	2.792	2.835	3.144	2.222	2.806	0.719	2.750
/cut2	0.450	2.788	3.404	3.142	2.793	2.802	1.283	2.748
/cut3	1.547	2.775	4.506	3.133	3.899	2.794	2.379	2.736
/cut4	3.396	2.760	6.355**	3.122	5.752**	2.780	4.229	2.720
Number of observations	3,305		3,305		3,305		3,305	
chi2		161		180		206		157
chi2 (p-value)		0.000		0.000		0.000		0.000
Pseudo R2	0.036		0.038		0.040		0.035	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A5.26. Ordered Logit Regressions, labor regulations - an obstacle (l30a)								
	Specification I		Specification II		Specification III		Specification IV	
	coef	se	coef	se	coef	se	coef	se
Insider Governor: 1 = Yes	-0.265**	0.116	-0.990**	0.482	-0.460***	0.122	-0.297**	0.125
Governor's tenure (log)	-0.302***	0.074	-0.442***	0.127				
Governor: origin X tenure			0.198	0.124				
Governor's tenure: 1st quartile					0.608***	0.167		
Governor's tenure: 2nd quartile					-0.243	0.150		
Governor's tenure: 3rd quartile					-0.241*	0.126		
Governor's tenure (months)							-0.011***	0.003
Governor's tenure squared (months)							0.00004	0.00001
size: less than 20 employees	-0.426***	0.115	-0.422***	0.114	-0.428***	0.113	-0.432***	0.114
size: 20-99 employees	0.011	0.110	0.015	0.110	-0.004	0.110	0.007	0.110
age: 1-6 yrs	-0.167	0.104	-0.156	0.104	-0.020	0.103	-0.136	0.104
age: 7-9 yrs	-0.056	0.114	-0.052	0.114	0.037	0.112	-0.036	0.113
age: 10-15 yrs	-0.228**	0.103	-0.225**	0.103	-0.185*	0.104	-0.217**	0.103
exports >5% of sales	0.444***	0.117	0.446***	0.117	0.410***	0.117	0.449***	0.117
export status unknown or missing	0.219	0.428	0.214	0.426	0.241	0.425	0.230	0.427
foreign actors own more than 10%	0.058	0.206	0.045	0.206	0.043	0.212	0.057	0.205
state owns more than 10%	-0.453	0.412	-0.448	0.411	-0.419	0.404	-0.437	0.411
ownership status unknown or missing	0.263	0.357	0.283	0.359	0.242	0.369	0.277	0.357
log of GRP for 2010	-0.197	0.276	-0.078	0.272	-0.402	0.262	-0.191	0.276
% self-identifying as Russian	0.011***	0.003	0.011***	0.003	0.016***	0.004	0.011***	0.003
% construction in GRP value-added	0.060***	0.016	0.054***	0.016	0.060***	0.015	0.066***	0.018
% retail in GRP value-added	-0.020	0.013	-0.016	0.014	-0.029**	0.013	-0.017	0.013
% natural resource extraction in GRP value-added	0.009	0.010	0.006	0.010	0.008	0.009	0.009	0.010
sector: light manufacturing	0.095	0.123	0.091	0.122	0.103	0.121	0.088	0.122
sector: heavy manufacturing	-0.151	0.119	-0.154	0.119	-0.132	0.117	-0.149	0.119
sector: machinery and electronics	-0.234*	0.139	-0.239*	0.139	-0.234*	0.138	-0.245*	0.139
sector: services	0.019	0.112	0.019	0.111	0.017	0.110	0.019	0.112
sector: construction	-0.148	0.125	-0.150	0.125	-0.156	0.126	-0.145	0.126
population per sq. km	0.00003	0.00006	-0.00001	0.00006	0.00004	0.00005	0.00003	0.00006
Experience of Governor Change: 1 = Yes	-0.019	0.124	0.007	0.124	0.255**	0.126	0.074	0.125
/cut1	-2.191	3.392	-1.157	3.338	-3.011	3.105	-1.211	3.309
/cut2	-1.446	3.398	-0.412	3.344	-2.259	3.110	-0.466	3.315
/cut3	-0.198	3.412	0.837	3.355	-1.001	3.120	0.781	3.328
/cut4	1.432	3.401	2.469	3.344	0.637	3.107	2.411	3.319
Number of observations	4,151		4,151		4,151		4,151	
chi2		157		159		177		154
chi2 (p-value)		0.000		0.000		0.000		0.000
Pseudo R2	0.018		0.019		0.023		0.018	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A5.27. Ordered Logit Regressions, uneducated workforce - an obstacle (l30b)								
	Specification I		Specification II		Specification III		Specification IV	
	coef	se	coef	se	coef	se	coef	se
Insider Governor: 1 = Yes	-0.354***	0.099	-0.120	0.432	-0.469***	0.101	-0.334***	0.101
Governor's tenure (log)	-0.159***	0.059	-0.115	0.103				
Governor: origin X tenure			-0.063	0.116				
Governor's tenure: 1st quartile					0.312**	0.139		
Governor's tenure: 2nd quartile					-0.324**	0.126		
Governor's tenure: 3rd quartile					-0.013	0.117		
Governor's tenure (months)							-0.003	0.003
Governor's tenure squared (months)							0.00000	0.00001
size: less than 20 employees	-0.581***	0.098	-0.582***	0.098	-0.592***	0.098	-0.584***	0.098
size: 20-99 employees	-0.121	0.097	-0.123	0.097	-0.132	0.097	-0.121	0.097
age: 1-6 yrs	-0.029	0.098	-0.032	0.099	0.103	0.098	-0.029	0.098
age: 7-9 yrs	-0.045	0.096	-0.047	0.096	0.042	0.096	-0.043	0.095
age: 10-15 yrs	-0.183**	0.090	-0.185**	0.090	-0.140	0.090	-0.183**	0.090
exports >5% of sales	0.106	0.103	0.105	0.103	0.091	0.103	0.106	0.103
export status unknown or missing	-0.176	0.617	-0.175	0.619	-0.143	0.588	-0.188	0.619
foreign actors own more than 10%	0.243	0.171	0.247	0.171	0.237	0.175	0.250	0.171
state owns more than 10%	-0.408	0.380	-0.413	0.378	-0.367	0.382	-0.414	0.380
ownership status unknown or missing	0.219	0.265	0.214	0.265	0.223	0.276	0.229	0.264
log of GRP for 2010	0.072	0.199	0.031	0.208	-0.107	0.194	0.089	0.201
% self-identifying as Russian	-0.006*	0.003	-0.006**	0.003	-0.001	0.003	-0.006**	0.003
%construction in GRP value-added	0.020	0.014	0.022	0.014	0.018	0.013	0.018	0.014
%retail in GRP value-added	-0.001	0.012	-0.002	0.012	-0.008	0.012	0.001	0.012
%natural resource extraction in GRP value-added	-0.005	0.008	-0.004	0.008	-0.004	0.008	-0.005	0.008
sector: light manufacturing	0.241**	0.112	0.244**	0.112	0.238**	0.113	0.242**	0.112
sector: heavy manufacturing	0.085	0.104	0.087	0.104	0.088	0.105	0.083	0.104
sector: machinery and electronics	0.254**	0.121	0.256**	0.121	0.240**	0.120	0.249**	0.120
sector: services	0.315***	0.094	0.314***	0.094	0.309***	0.096	0.311***	0.094
sector: construction	0.112	0.113	0.113	0.113	0.092	0.112	0.109	0.112
population per sq. km	-0.00004	0.00004	-0.00003	0.00005	-0.00003	0.00004	-0.00004	0.00004
Experience of Governor Change: 1 = Yes	-0.185*	0.105	-0.195*	0.106	0.051	0.104	-0.181*	0.104
/cut1	-1.077	2.379	-1.444	2.427	-2.267	2.277	-0.456	2.342
/cut2	-0.490	2.379	-0.856	2.428	-1.677	2.277	0.130	2.343
/cut3	0.367	2.380	0.001	2.427	-0.816	2.278	0.987	2.344
/cut4	1.797	2.379	1.431	2.427	0.621	2.277	2.416	2.343
Number of observations	4,131		4,131		4,131		4,131	
chi2		170		171		210		171
chi2 (p-value)		0.000		0.000		0.000		0.000
Pseudo R2	0.015		0.015		0.017		0.015	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A5.28. Ordered Logit Regressions, Perception of corruption - Town no. 1 (vin1a)								
	Specification I		Specification II		Specification III		Specification IV	
	coef	se	coef	se	coef	se	coef	se
Insider Governor: 1 = Yes	-0.735***	0.111	0.518	0.514	-0.786***	0.101	-0.755***	0.109
Governor's tenure (log)	0.158***	0.061	0.389***	0.107				
Governor: origin X tenure			-0.338**	0.143				
Governor's tenure: 1st quartile					-0.102	0.148		
Governor's tenure: 2nd quartile					-0.535***	0.138		
Governor's tenure: 3rd quartile					0.192	0.135		
Governor's tenure (months)							0.004	0.003
Governor's tenure squared (months)							-0.00001	0.00001
size: less than 20 employees	-0.120	0.101	-0.119	0.100	-0.126	0.101	-0.116	0.100
size: 20-99 employees	-0.113	0.099	-0.116	0.099	-0.110	0.099	-0.113	0.099
age: 1-6 yrs	-0.314***	0.097	-0.336***	0.098	-0.271***	0.097	-0.281***	0.098
age: 7-9 yrs	-0.255***	0.093	-0.267***	0.093	-0.227**	0.093	-0.235**	0.093
age: 10-15 yrs	-0.021	0.086	-0.033	0.086	0.005	0.087	-0.011	0.086
exports >5% of sales	0.078	0.102	0.073	0.103	0.052	0.103	0.077	0.102
export status unknown or missing	-0.429	0.529	-0.381	0.519	-0.349	0.543	-0.417	0.530
foreign actors own more than 10%	-0.327	0.221	-0.311	0.218	-0.347	0.223	-0.325	0.222
state owns more than 10%	0.390	0.445	0.357	0.456	0.455	0.446	0.407	0.440
ownership status unknown or missing	0.417	0.356	0.389	0.355	0.411	0.352	0.420	0.353
log of GRP for 2010	0.715***	0.259	0.453	0.305	0.485**	0.227	0.709***	0.259
% self-identifying as Russian	-0.010***	0.004	-0.010***	0.004	-0.005	0.004	-0.010**	0.004
% construction in GRP value-added	-0.033**	0.014	-0.023	0.014	-0.029**	0.013	-0.034**	0.015
% retail in GRP value-added	0.001	0.016	-0.008	0.017	-0.009	0.015	0.000	0.016
% natural resource extraction in GRP value-added	-0.019**	0.009	-0.014*	0.009	-0.015*	0.008	-0.019**	0.009
sector: light manufacturing	-0.023	0.120	-0.008	0.119	-0.035	0.116	-0.019	0.119
sector: heavy manufacturing	0.099	0.120	0.108	0.119	0.100	0.117	0.103	0.120
sector: machinery and electronics	-0.013	0.148	0.006	0.147	-0.008	0.144	-0.014	0.148
sector: services	-0.037	0.109	-0.040	0.109	-0.051	0.105	-0.033	0.108
sector: construction	-0.219	0.136	-0.221*	0.134	-0.259*	0.133	-0.217	0.136
population per sq. km	-0.00009	0.00006	-0.00001	0.00008	-0.00007	0.00006	-0.00010	0.00006
Experience of Governor Change: 1 = Yes	-0.247**	0.101	-0.297***	0.101	-0.198*	0.107	-0.179*	0.107
/cut1	6.325*	3.300	3.809	3.783	3.108	2.861	5.938*	3.280
/cut2	7.552**	3.291	5.038	3.773	4.347	2.854	7.165**	3.271
/cut3	8.842***	3.285	6.336*	3.762	5.653**	2.850	8.457***	3.267
/cut4	10.380***	3.284	7.881**	3.753	7.201**	2.849	9.996***	3.266
Number of observations	3,646		3,646		3,646		3,646	
chi2		132		140		176		141
chi2 (p-value)		0.000		0.000		0.000		0.000
Pseudo R2	0.021		0.022		0.026		0.021	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A5.29. Ordered Logit Regressions, Perception of corruption - Town no. 2 (vin1b)

	Specification I		Specification II		Specification III		Specification IV	
	coef	**se**	**coef**	**se**	**coef**	**se**	**coef**	**se**
Insider Governor: 1 = Yes	-0.456***	0.098	-0.476	0.553	-0.468***	0.093	-0.520***	0.100
Governor's tenure (log)	0.067	0.062	0.063	0.130				
Governor: origin X tenure			0.005	0.157				
Governor's tenure: 1st quartile					-0.009	0.148		
Governor's tenure: 2nd quartile					-0.196	0.144		
Governor's tenure: 3rd quartile					0.228*	0.135		
Governor's tenure (months)							-0.003	0.003
Governor's tenure squared (months)							0.00002	0.00001
size: less than 20 employees	-0.162	0.107	-0.162	0.107	-0.169	0.107	-0.163	0.107
size: 20-99 employees	-0.047	0.111	-0.047	0.111	-0.045	0.110	-0.055	0.112
age: 1-6 yrs	-0.081	0.103	-0.080	0.104	-0.062	0.103	-0.055	0.105
age: 7-9 yrs	0.135	0.096	0.135	0.096	0.151	0.096	0.144	0.097
age: 10-15 yrs	0.148	0.092	0.148	0.092	0.161*	0.091	0.157*	0.092
exports >5% of sales	0.145	0.117	0.145	0.117	0.139	0.117	0.144	0.116
export status unknown or missing	0.121	0.667	0.120	0.666	0.177	0.669	0.131	0.647
foreign actors own more than 10%	-0.336*	0.201	-0.336*	0.201	-0.337*	0.199	-0.341*	0.200
state owns more than 10%	0.616	0.421	0.616	0.421	0.668	0.420	0.627	0.418
ownership status unknown or missing	-0.276	0.423	-0.276	0.423	-0.262	0.408	-0.289	0.422
log of GRP for 2010	0.264	0.236	0.268	0.268	0.166	0.215	0.255	0.236
% self-identifying as Russian	-0.000	0.003	-0.000	0.003	0.002	0.004	0.002	0.004
% construction in GRP value-added	-0.016	0.013	-0.016	0.014	-0.014	0.013	-0.007	0.014
% retail in GRP value-added	-0.021	0.015	-0.021	0.016	-0.025*	0.014	-0.021	0.014
% natural resource extraction in GRP value-added	-0.012	0.008	-0.012	0.008	-0.009	0.008	-0.011	0.008
sector: light manufacturing	-0.142	0.117	-0.142	0.116	-0.153	0.116	-0.139	0.118
sector: heavy manufacturing	0.028	0.124	0.028	0.123	0.026	0.122	0.038	0.124
sector: machinery and electronics	-0.115	0.149	-0.116	0.149	-0.109	0.148	-0.118	0.149
sector: services	-0.159	0.111	-0.159	0.111	-0.169	0.110	-0.143	0.111
sector: construction	-0.171	0.136	-0.171	0.136	-0.194	0.137	-0.164	0.135
population per sq. km	-0.00010	0.00006	-0.00010	0.00007	-0.00009	0.00005	-0.00011	0.00006
Experience of Governor Change: 1 = Yes	-0.101	0.103	-0.100	0.103	-0.084	0.110	-0.025	0.109
/cut1	1.347	2.952	1.383	3.215	0.028	2.649	1.205	2.914
/cut2	2.272	2.956	2.308	3.220	0.955	2.653	2.132	2.919
/cut3	3.601	2.952	3.637	3.216	2.289	2.651	3.465	2.916
/cut4	5.340*	2.950	5.376*	3.218	4.035	2.650	5.205*	2.915
Number of observations	3,662		3,662		3,662		3,662	
chi2		68		71		82		81
chi2 (p-value)		0.000		0.000		0.000		0.000
Pseudo R2	0.009		0.009		0.011		0.010	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A5.30. Ordered Logit Regressions, Perception of corruption - Town no. 3 (vin1c)

	Specification I		Specification II		Specification III		Specification IV	
	coef	**se**	**coef**	**se**	**coef**	**se**	**coef**	**se**
Insider Governor: 1 = Yes	-0.206**	0.093	1.284***	0.375	-0.137	0.090	-0.185*	0.097
Governor's tenure (log)	0.285***	0.065	0.559***	0.088				
Governor: origin X tenure			-0.399***	0.094				
Governor's tenure: 1st quartile					-0.707***	0.155		
Governor's tenure: 2nd quartile					-0.424***	0.149		
Governor's tenure: 3rd quartile					0.088	0.114		
Governor's tenure (months)							0.010***	0.003
Governor's tenure squared (months)							-0.00003	0.00001
size: less than 20 employees	0.050	0.111	0.045	0.111	0.048	0.111	0.058	0.111
size: 20-99 employees	0.143	0.109	0.132	0.109	0.144	0.109	0.149	0.109
age: 1-6 yrs	-0.142	0.099	-0.162	0.099	-0.147	0.099	-0.152	0.099
age: 7-9 yrs	-0.234**	0.101	-0.239**	0.100	-0.221**	0.101	-0.242**	0.100
age: 10-15 yrs	-0.022	0.088	-0.029	0.087	-0.017	0.089	-0.029	0.088
exports >5% of sales	0.084	0.119	0.083	0.120	0.087	0.118	0.076	0.120
export status unknown or missing	-0.410	0.726	-0.352	0.717	-0.329	0.739	-0.392	0.726
foreign actors own more than 10%	0.006	0.190	0.024	0.190	0.011	0.192	0.005	0.190
state owns more than 10%	0.390	0.385	0.353	0.383	0.410	0.383	0.382	0.382
ownership status unknown or missing	0.637*	0.340	0.600*	0.340	0.663*	0.339	0.622*	0.342
log of GRP for 2010	0.513**	0.210	0.223	0.216	0.486**	0.213	0.494**	0.211
% self-identifying as Russian	-0.021***	0.003	-0.021***	0.003	-0.023***	0.003	-0.021***	0.003
% construction in GRP value-added	-0.082***	0.014	-0.071***	0.013	-0.082***	0.013	-0.087***	0.015
% retail in GRP value-added	-0.005	0.014	-0.016	0.015	-0.002	0.014	-0.009	0.014
% natural resource extraction in GRP value-added	-0.019**	0.009	-0.014	0.009	-0.016*	0.009	-0.020**	0.009
sector: light manufacturing	0.012	0.114	0.033	0.113	-0.002	0.112	0.016	0.114
sector: heavy manufacturing	-0.179*	0.109	-0.168	0.108	-0.195*	0.107	-0.180*	0.109
sector: machinery and electronics	-0.021	0.139	-0.005	0.140	-0.035	0.138	-0.013	0.139
sector: services	0.046	0.102	0.046	0.102	0.031	0.102	0.044	0.103
sector: construction	0.015	0.135	0.016	0.133	-0.006	0.133	0.008	0.134
population per sq. km	0.00000	0.00005	0.00010	0.00005	0.00001	0.00005	0.00000	0.00005
Experience of Governor Change: 1 = Yes	-0.066	0.110	-0.126	0.110	-0.061	0.112	-0.113	0.114
/cut1	1.660	2.444	-1.065	2.520	-0.124	2.508	0.620	2.465
/cut2	2.630	2.446	-0.096	2.524	0.846	2.508	1.588	2.467
/cut3	3.846	2.457	1.125	2.533	2.068	2.518	2.803	2.478
/cut4	5.333**	2.457	2.620	2.531	3.567	2.520	4.290*	2.477
Number of observations	3,664		3,664		3,664		3,664	
chi2		164		189		188		162
chi2 (p-value)		0.000		0.000		0.000		0.000
Pseudo R2	0.020		0.022		0.022		0.019	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A5.31. Ordered Logit Regressions, Perception of corruption - Town no. 4 (vin1d)

	Specification I		Specification II		Specification III		Specification IV	
	coef	**se**	**coef**	**se**	**coef**	**se**	**coef**	**se**
Insider Governor: 1 = Yes	-0.188*	0.104	2.444***	0.400	-0.076	0.104	-0.138	0.110
Governor's tenure (log)	0.236***	0.057	0.715***	0.083				
Governor: origin X tenure			-0.705***	0.100				
Governor's tenure: 1st quartile					-0.668***	0.135		
Governor's tenure: 2nd quartile					0.009	0.144		
Governor's tenure: 3rd quartile					0.036	0.123		
Governor's tenure (months)							0.009***	0.003
Governor's tenure squared (months)							-0.00003	0.00001
size: less than 20 employees	0.093	0.102	0.089	0.101	0.098	0.101	0.104	0.102
size: 20-99 employees	-0.003	0.098	-0.020	0.098	0.000	0.098	0.007	0.098
age: 1-6 yrs	-0.244**	0.095	-0.286***	0.095	-0.319***	0.097	-0.305***	0.097
age: 7-9 yrs	-0.309***	0.095	-0.326***	0.095	-0.347***	0.097	-0.347***	0.095
age: 10-15 yrs	-0.144	0.088	-0.164*	0.087	-0.164*	0.088	-0.169*	0.088
exports >5% of sales	0.019	0.110	0.004	0.111	0.042	0.110	0.007	0.111
export status unknown or missing	-0.180	0.546	-0.114	0.517	-0.200	0.541	-0.189	0.540
foreign actors own more than 10%	0.037	0.168	0.073	0.170	0.043	0.168	0.034	0.169
state owns more than 10%	0.333	0.478	0.326	0.477	0.352	0.478	0.307	0.469
ownership status unknown or missing	-0.173	0.265	-0.238	0.269	-0.168	0.268	-0.196	0.268
log of GRP for 2010	-0.016	0.239	-0.554**	0.251	0.120	0.216	-0.034	0.237
% self-identifying as Russian	-0.010***	0.003	-0.011***	0.003	-0.015***	0.003	-0.010***	0.003
% construction in GRP value-added	0.012	0.013	0.033**	0.013	0.011	0.013	0.007	0.014
% retail in GRP value-added	0.009	0.013	-0.008	0.014	0.019	0.013	0.005	0.013
% natural resource extraction in GRP value-added	0.011	0.008	0.022***	0.008	0.012	0.007	0.011	0.008
sector: light manufacturing	-0.149	0.110	-0.117	0.109	-0.157	0.108	-0.146	0.110
sector: heavy manufacturing	-0.128	0.107	-0.109	0.105	-0.148	0.106	-0.132	0.107
sector: machinery and electronics	-0.155	0.130	-0.135	0.128	-0.166	0.129	-0.138	0.129
sector: services	-0.037	0.109	-0.045	0.107	-0.039	0.108	-0.046	0.108
sector: construction	-0.220*	0.117	-0.220*	0.117	-0.215*	0.117	-0.225*	0.116
population per sq. km	0.00004	0.00004	0.00021	0.00005	0.00003	0.00004	0.00005	0.00004
Experience of Governor Change: 1 = Yes	0.171*	0.100	0.061	0.100	0.060	0.107	0.011	0.106
/cut1	-2.513	2.815	-7.667***	2.938	-2.296	2.544	-3.544	2.773
/cut2	-1.557	2.817	-6.710**	2.939	-1.337	2.546	-2.589	2.774
/cut3	-0.283	2.829	-5.424*	2.948	-0.054	2.556	-1.317	2.786
/cut4	1.291	2.836	-3.823	2.951	1.532	2.562	0.256	2.793
Number of observations	3,660		3,660		3,660		3,660	
chi2		69		125		98		67
chi2 (p-value)		0.000		0.000		0.000		0.000
Pseudo R2	0.008		0.014		0.011		0.007	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A5.32. Ordered Logit Regressions, Perception of corruption - Town no. 5 (vin1e)

	Specification I		Specification II		Specification III		Specification IV	
	coef	**se**	**coef**	**se**	**coef**	**se**	**coef**	**se**
Insider Governor: 1 = Yes	0.019	0.114	3.390***	0.421	0.094	0.116	0.100	0.121
Governor's tenure (log)	0.234***	0.065	0.869***	0.098				
Governor: origin X tenure			-0.905***	0.107				
Governor's tenure: 1st quartile					-0.872***	0.161		
Governor's tenure: 2nd quartile					-0.210	0.154		
Governor's tenure: 3rd quartile					-0.323**	0.130		
Governor's tenure (months)							0.012***	0.003
Governor's tenure squared (months)							-0.00005	0.00001
size: less than 20 employees	0.150	0.105	0.142	0.106	0.159	0.104	0.161	0.104
size: 20-99 employees	0.029	0.104	0.006	0.105	0.029	0.104	0.041	0.104
age: 1-6 yrs	-0.038	0.104	-0.089	0.104	-0.067	0.105	-0.091	0.105
age: 7-9 yrs	-0.112	0.106	-0.137	0.106	-0.127	0.106	-0.145	0.105
age: 10-15 yrs	-0.136	0.097	-0.162*	0.097	-0.147	0.098	-0.161*	0.097
exports >5% of sales	0.059	0.122	0.049	0.122	0.081	0.121	0.048	0.122
export status unknown or missing	-0.492	0.702	-0.394	0.693	-0.492	0.699	-0.481	0.696
foreign actors own more than 10%	-0.130	0.181	-0.090	0.182	-0.122	0.179	-0.128	0.182
state owns more than 10%	-0.006	0.449	-0.079	0.472	-0.029	0.454	-0.043	0.446
ownership status unknown or missing	0.203	0.404	0.111	0.428	0.222	0.411	0.183	0.405
log of GRP for 2010	0.143	0.256	-0.471*	0.254	0.275	0.243	0.144	0.251
% self-identifying as Russian	-0.015***	0.003	-0.016***	0.003	-0.021***	0.003	-0.016***	0.003
% construction in GRP value-added	-0.010	0.017	0.012	0.016	-0.013	0.015	-0.021	0.018
% retail in GRP value-added	0.018	0.014	-0.005	0.015	0.025*	0.015	0.013	0.014
% natural resource extraction in GRP value-added	-0.003	0.008	0.009	0.008	-0.005	0.008	-0.004	0.008
sector: light manufacturing	-0.254**	0.118	-0.215*	0.118	-0.253**	0.116	-0.250**	0.118
sector: heavy manufacturing	-0.230*	0.119	-0.209*	0.117	-0.244**	0.116	-0.239**	0.118
sector: machinery and electronics	-0.218*	0.129	-0.193	0.129	-0.232*	0.128	-0.202	0.127
sector: services	0.009	0.119	0.002	0.117	0.015	0.119	-0.007	0.117
sector: construction	-0.252*	0.130	-0.246**	0.124	-0.237*	0.128	-0.263**	0.127
population per sq. km	0.00007	0.00005	0.00027	0.00006	0.00006	0.00005	0.00007	0.00005
Experience of Governor Change: 1 = Yes	0.158	0.107	0.025	0.106	0.152	0.110	0.006	0.111
/cut1	-1.226	3.103	-6.894**	3.007	-1.276	2.903	-2.057	3.027
/cut2	-0.495	3.105	-6.161**	3.007	-0.543	2.905	-1.327	3.029
/cut3	0.564	3.121	-5.085*	3.019	0.524	2.921	-0.268	3.045
/cut4	1.909	3.124	-3.708	3.024	1.882	2.926	1.082	3.050
Number of observations	3,609		3,609		3,609		3,609	
chi2		106		184		126		117
chi2 (p-value)		0.000		0.000		0.000		0.000
Pseudo R2	0.011		0.021		0.015		0.012	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A6.1. Logit Regressions: was bribe expected at tax meetings (j5)				
	Specification I	Specification II	Specification III	Specification IV
Insider Governor: 1 = Yes	-0.0275**	-0.0258*	-0.0268**	-0.0269**
	(0.0116)	(0.0134)	(0.0119)	(0.0122)
Governor's tenure (log)	0.00476	0.00409		
	(0.00742)	(0.00758)		
Governor: origin X tenure		0.00708		
		(0.0142)		
Governor's tenure: 1st quartile			-0.0180	
			(0.0189)	
Governor's tenure: 2nd quartile			-0.00787	
			(0.0161)	
Governor's tenure: 3rd quartile			-0.00807	
			(0.0138)	
Governor's tenure (months)				0.000236
				(0.000317)
Governor's tenure squared (months)				-7.64e-07
				(1.29e-06)
size: less than 20 employees	-0.00998	-0.00970	-0.00955	-0.0100
	(0.0131)	(0.0131)	(0.0131)	(0.0131)
size: 20-99 employees	-0.00348	-0.00335	-0.00342	-0.00348
	(0.0120)	(0.0120)	(0.0120)	(0.0120)
age: 1-6 yrs	-0.0335**	-0.0326**	-0.0329**	-0.0328**
	(0.0155)	(0.0155)	(0.0157)	(0.0158)
age: 7-9 yrs	-0.0290**	-0.0284**	-0.0286**	-0.0283**
	(0.0142)	(0.0142)	(0.0143)	(0.0144)
age: 10-15 yrs	-0.0220*	-0.0219*	-0.0216*	-0.0217*
	(0.0128)	(0.0128)	(0.0128)	(0.0127)
exports >5% of sales	0.0128	0.0128	0.0130	0.0127
	(0.0154)	(0.0154)	(0.0155)	(0.0154)
foreign actors own more than 10%	0.0348*	0.0343*	0.0351*	0.0350*
	(0.0194)	(0.0197)	(0.0194)	(0.0194)
log of GRP for 2010	-0.0287	-0.0236	-0.0287	-0.0280
	(0.0223)	(0.0228)	(0.0213)	(0.0221)
% self-identifying as Russian	-0.000200	-0.000182	-0.000283	-0.000234
	(0.000377)	(0.000364)	(0.000398)	(0.000378)
%construction in GRP value-added	0.00126	0.00104	0.00129	0.000983
	(0.00160)	(0.00156)	(0.00164)	(0.00167)
%retail in GRP value-added	0.00129	0.00150	0.00139	0.00126
	(0.00156)	(0.00163)	(0.00160)	(0.00155)
%natural resource extraction in GRP value-added	0.00138	0.00127	0.00137	0.00131
	(0.000837)	(0.000824)	(0.000845)	(0.000839)
sector: light manufacturing	-0.00525	-0.00525	-0.00500	-0.00536
	(0.0138)	(0.0138)	(0.0136)	(0.0137)
sector: heavy manufacturing	-0.00451	-0.00457	-0.00444	-0.00482
	(0.0129)	(0.0129)	(0.0128)	(0.0130)
sector: machinery and electronics	-0.0611**	-0.0612**	-0.0613**	-0.0615**
	(0.0283)	(0.0283)	(0.0283)	(0.0283)
sector: services	-0.0216	-0.0215	-0.0214	-0.0216
	(0.0163)	(0.0163)	(0.0163)	(0.0163)
sector: construction	0.00545	0.00557	0.00570	0.00512
	(0.0151)	(0.0151)	(0.0149)	(0.0151)
population per sq. km	3.37e-09	-1.78e-06	2.55e-07	-1.67e-07
	(5.24e-06)	(5.91e-06)	(5.17e-06)	(5.18e-06)
Experience of Governor Change: 1 = Yes	-0.0129	-0.0113	-0.0116	-0.0120
	(0.0151)	(0.0152)	(0.0150)	(0.0155)
Observations	1,900	1,900	1,900	1,900

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table A6.2. Logit Regressions: was bribe expected to get operating license (j15)				
	Specification I	Specification II	Specification III	Specification IV
Insider Governor: 1 = Yes	-0.0438	-0.0438	-0.0300	-0.0373
	(0.0275)	(0.0313)	(0.0308)	(0.0292)
Governor's tenure (log)	0.0208	0.0201		
	(0.0163)	(0.0162)		
Governor: origin X tenure		0.00528		
		(0.0276)		
Governor's tenure: 1st quartile			-0.0734*	
			(0.0410)	
Governor's tenure: 2nd quartile			-0.0197	
			(0.0325)	
Governor's tenure: 3rd quartile			-0.000225	
			(0.0279)	
Governor's tenure (months)				0.000893
				(0.000670)
Governor's tenure squared (months)				-3.47e-06
				(2.89e-06)
size: less than 20 employees	-0.00556	-0.00494	-0.00503	-0.00556
	(0.0302)	(0.0301)	(0.0300)	(0.0302)
size: 20-99 employees	0.00532	0.00582	0.00571	0.00545
	(0.0262)	(0.0262)	(0.0261)	(0.0262)
age: 1-6 yrs	-0.0274	-0.0271	-0.0284	-0.0331
	(0.0294)	(0.0293)	(0.0290)	(0.0297)
age: 7-9 yrs	0.0149	0.0155	0.0141	0.0101
	(0.0312)	(0.0313)	(0.0301)	(0.0306)
age: 10-15 yrs	-0.00755	-0.00751	-0.00440	-0.00981
	(0.0249)	(0.0250)	(0.0249)	(0.0249)
exports >5% of sales	0.0797***	0.0798***	0.0822***	0.0783***
	(0.0259)	(0.0259)	(0.0257)	(0.0258)
export status unknown or missing	0.106	0.105	0.112	0.0982
	(0.0907)	(0.0917)	(0.0913)	(0.0922)
foreign actors own more than 10%	-0.0691	-0.0697	-0.0693	-0.0679
	(0.0840)	(0.0841)	(0.0833)	(0.0840)
state owns more than 10%	0.0505	0.0521	0.0525	0.0485
	(0.0599)	(0.0600)	(0.0603)	(0.0600)
log of GRP for 2010	0.0656	0.0735	0.0811	0.0670
	(0.0527)	(0.0555)	(0.0558)	(0.0530)
% self-identifying as Russian	-0.000535	-0.000532	-0.00111	-0.000611
	(0.000815)	(0.000800)	(0.000967)	(0.000848)
% construction in GRP value-added	-0.00199	-0.00215	-0.00256	-0.00273
	(0.00398)	(0.00395)	(0.00401)	(0.00415)
% retail in GRP value-added	-0.00254	-0.00227	-0.00182	-0.00285
	(0.00297)	(0.00295)	(0.00315)	(0.00296)
% natural resource extraction in GRP value-added	-0.00104	-0.00112	-0.00120	-0.00125
	(0.00173)	(0.00174)	(0.00181)	(0.00182)
sector: light manufacturing	-0.000366	-0.000406	-0.00317	-0.000866
	(0.0345)	(0.0344)	(0.0341)	(0.0343)
sector: heavy manufacturing	-0.00909	-0.00919	-0.00884	-0.00958
	(0.0297)	(0.0296)	(0.0297)	(0.0297)
sector: machinery and electronics	-0.0484	-0.0482	-0.0506*	-0.0484
	(0.0305)	(0.0304)	(0.0301)	(0.0306)
sector: services	-0.106***	-0.106***	-0.105***	-0.106***
	(0.0366)	(0.0367)	(0.0366)	(0.0364)
sector: construction	-0.0284	-0.0283	-0.0283	-0.0302
	(0.0255)	(0.0255)	(0.0252)	(0.0253)
population per sq. km	-2.61e-06	-5.19e-06	-3.59e-06	-2.90e-06
	(1.08e-05)	(1.13e-05)	(1.12e-05)	(1.07e-05)
Experience of Governor Change: 1 = Yes	0.0297	0.0329	0.0287	0.0164
	(0.0352)	(0.0369)	(0.0322)	(0.0341)
Observations	893	893	893	893

Standard errors in parentheses

***p<0.01, **p<0.05, *p<0.1

Table A6.3. Logit Regressions: was bribe expected for construction permit (g4)				
	Specification I	Specification II	Specification III	Specification IV
Insider Governor: 1 = Yes	-0.0655	-0.0359	-0.0545	-0.0364
	(0.0603)	(0.0703)	(0.0569)	(0.0591)
Governor's tenure (log)	0.0215	0.0171		
	(0.0335)	(0.0336)		
Governor: origin X tenure		0.0741		
		(0.0639)		
Governor's tenure: 1st quartile			0.0470	
			(0.0861)	
Governor's tenure: 2nd quartile			0.0358	
			(0.0789)	
Governor's tenure: 3rd quartile			0.244***	
			(0.0607)	
Governor's tenure (months)				0.00309**
				(0.00157)
Governor's tenure squared (months)				-1.52e-05**
				(7.16e-06)
size: less than 20 employees	0.0162	0.0182	-0.00401	0.00771
	(0.0656)	(0.0644)	(0.0653)	(0.0658)
size: 20-99 employees	0.0626	0.0648	0.0659	0.0609
	(0.0545)	(0.0536)	(0.0532)	(0.0543)
age: 1-6 yrs	-0.0618	-0.0631	-0.0840	-0.0769
	(0.0687)	(0.0688)	(0.0662)	(0.0689)
age: 7-9 yrs	-0.0261	-0.0260	-0.0297	-0.0344
	(0.0704)	(0.0707)	(0.0673)	(0.0682)
age: 10-15 yrs	-0.0342	-0.0325	-0.0474	-0.0427
	(0.0564)	(0.0568)	(0.0546)	(0.0548)
exports >5% of sales	0.259***	0.261***	0.212***	0.256***
	(0.0643)	(0.0638)	(0.0615)	(0.0637)
foreign actors own more than 10%	-0.121	-0.116	-0.145	-0.129
	(0.155)	(0.158)	(0.130)	(0.147)
log of GRP for 2010	0.294***	0.346***	0.383***	0.290***
	(0.112)	(0.120)	(0.118)	(0.111)
% self-identifying as Russian	-0.00251	-0.00257	-0.00304	-0.00329*
	(0.00177)	(0.00173)	(0.00194)	(0.00183)
%construction in GRP value-added	-0.0169*	-0.0187**	-0.0177**	-0.0197**
	(0.00939)	(0.00930)	(0.00752)	(0.00894)
%retail in GRP value-added	-0.00982	-0.00735	-0.00760	-0.00923
	(0.00668)	(0.00727)	(0.00681)	(0.00657)
%natural resource extraction in GRP value-added	-0.0118***	-0.0124***	-0.0129***	-0.0118**
	(0.00444)	(0.00445)	(0.00464)	(0.00458)
sector: light manufacturing	0.00977	0.00252	0.00533	0.000142
	(0.0719)	(0.0726)	(0.0679)	(0.0702)
sector: heavy manufacturing	-0.152**	-0.158**	-0.124*	-0.159**
	(0.0718)	(0.0719)	(0.0662)	(0.0718)
sector: machinery and electronics	-0.121	-0.128	-0.0961	-0.115
	(0.0953)	(0.0949)	(0.0886)	(0.0956)
sector: services	-0.0408	-0.0453	-0.0475	-0.0388
	(0.0730)	(0.0738)	(0.0673)	(0.0704)
sector: construction	-0.0189	-0.0245	-0.00534	-0.0128
	(0.0570)	(0.0572)	(0.0539)	(0.0566)
population per sq. km	-9.01e-05***	-0.000102***	-0.000129**	-9.65e-05**
	(3.48e-05)	(3.36e-05)	(5.75e-05)	(4.37e-05)
Experience of Governor Change: 1 = Yes	-0.0839	-0.0826	-0.128*	-0.124*
	(0.0681)	(0.0680)	(0.0674)	(0.0671)
Observations	385	385	385	385

Standard errors in parentheses

***p<0.01, **p<0.05, *p<0.1

Table A6.4. Logit Regressions: Largest Obstacle - Access to land (m1adum4)				
	Specification I	Specification II	Specification III	Specification IV
Insider Governor: 1 = Yes	-0.0198*	-0.0174	-0.0237**	-0.0236**
	(0.0111)	(0.0116)	(0.0115)	(0.0119)
Governor's tenure (log)	-0.0130**	-0.0140**		
	(0.00653)	(0.00662)		
Governor: origin X tenure		0.0138		
		(0.0123)		
Governor's tenure: 1st quartile			0.00627	
			(0.0162)	
Governor's tenure: 2nd quartile			-0.000879	
			(0.0153)	
Governor's tenure: 3rd quartile			-0.0215	
			(0.0141)	
Governor's tenure (months)				-0.000668**
				(0.000276)
Governor's tenure squared (months)				2.62e-06**
				(1.18e-06)
size: less than 20 employees	-0.00114	-0.00102	-0.000440	-0.00137
	(0.0138)	(0.0138)	(0.0139)	(0.0138)
size: 20-99 employees	0.0154	0.0157	0.0155	0.0152
	(0.0140)	(0.0140)	(0.0140)	(0.0140)
age: 1-6 yrs	-0.00223	-0.00150	0.00291	-0.000403
	(0.0128)	(0.0128)	(0.0129)	(0.0129)
age: 7-9 yrs	-0.00681	-0.00639	-0.00331	-0.00575
	(0.0143)	(0.0143)	(0.0143)	(0.0143)
age: 10-15 yrs	0.000852	0.00121	0.00247	0.00162
	(0.0120)	(0.0121)	(0.0121)	(0.0121)
exports >5% of sales	0.0223	0.0224	0.0223	0.0227
	(0.0140)	(0.0140)	(0.0140)	(0.0140)
foreign actors own more than 10%	0.00414	0.00350	0.00357	0.00366
	(0.0244)	(0.0244)	(0.0244)	(0.0244)
ownership status unknown or missing	-0.0165	-0.0158	-0.0172	-0.0167
	(0.0495)	(0.0496)	(0.0495)	(0.0497)
log of GRP for 2010	-0.0126	-0.00567	-0.0103	-0.0131
	(0.0244)	(0.0256)	(0.0228)	(0.0245)
% self-identifying as Russian	0.000350	0.000364	0.000268	0.000406
	(0.000371)	(0.000363)	(0.000369)	(0.000377)
% construction in GRP value-added	0.00186	0.00154	0.00144	0.00249
	(0.00169)	(0.00170)	(0.00163)	(0.00175)
% retail in GRP value-added	-0.00318*	-0.00299*	-0.00306*	-0.00305*
	(0.00166)	(0.00167)	(0.00156)	(0.00163)
% natural resource extraction in GRP value-added	0.000219	7.75e-05	5.39e-06	0.000284
	(0.000955)	(0.000955)	(0.000899)	(0.000941)
sector: light manufacturing	-0.00574	-0.00614	-0.00511	-0.00581
	(0.0142)	(0.0142)	(0.0142)	(0.0143)
sector: heavy manufacturing	0.00797	0.00763	0.00861	0.00849
	(0.0125)	(0.0125)	(0.0125)	(0.0125)
sector: machinery and electronics	0.0360**	0.0358**	0.0356**	0.0360**
	(0.0159)	(0.0159)	(0.0160)	(0.0159)
sector: services	-0.0290**	-0.0290**	-0.0287**	-0.0288**
	(0.0143)	(0.0143)	(0.0143)	(0.0144)
sector: construction	0.0290**	0.0288**	0.0298**	0.0295**
	(0.0144)	(0.0144)	(0.0145)	(0.0144)
population per sq. km	6.11e-06	4.03e-06	5.68e-06	6.24e-06
	(6.19e-06)	(6.50e-06)	(5.68e-06)	(6.22e-06)
Experience of Governor Change: 1 = Yes	0.000252	0.00196	0.0126	0.00609
	(0.0125)	(0.0126)	(0.0134)	(0.0130)
Observations	4,135	4,135	4,135	4,135

Standard errors in parentheses
***p<0.01, **p<0.05, *p<0.1